HAWAII LAB COHORT:

SUPPORTING TEACHERS' LITERACY PEDAGOGY THROUGH TEACHER LEARNING COMMUNITIES IN HAWAII PUBLIC SCHOOLS

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DEDICATION

I dedicate my doctoral work to my mother who came to this country in search for a better life with only a dime in her pocket to make a phone call. Thank you for being a risk-taker, a survivor, and a dedicated mother to all of us. Your love, sweat, and devotion created a world of opportunities for me in my life that I am and will always be grateful for.

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ABSTRACT

This qualitative action research case study documents the beliefs of teaching and learning of the creator, facilitator and researcher of the Hawaii Lab Cohort (HLC) model after she sought to provide a new curriculum and model for teachers, which was backwards designed to improve literacy instruction. The new model was informed by the design elements of effective professional development for the 21st century and inspired by many previous studies surrounding Teacher Learning Communities. This study also documents the experiences of five elementary public-school teachers participating in the HLC over a period of one academic school year. Constructivism, situated learning, and Lave and Wenger's communities of practice theories framed the perspectives of the researcher. Multiple data sources were collected: one-to-one interviews, teacher questionnaires, artifacts from the observational classroom visits teachers made to one another, audio-recordings and transcripts of teachers' feedback and discussion during observational visit debriefs, audio-recordings and transcripts of the professional dialogue that took place during HLC meetings, and a researcher's journal. Using multiple data analysis tools, five themes were identified: sense of belonging, application, feedback, impact of student learning, and tension. Due to the findings, it is recommended that professional development opportunities be voluntary in participation, include relationship building, and build in the ability for teachers to co-construct the focus of their learning.

CHAPTER 1. INTRODUCTION

Background to the Study & Purpose

For the past ten years (2009-2019), I have served as the District Educational Specialist for literacy in a district on the Windward side of Oahu, Hawaii. In this specialist position, I have led, coordinated and observed a number of professional development (PD) literacy workshops for schools in this complex area. As a result of these experiences, I have gained a unique insider's perspective (Creswell, 2013) and understanding of teachers' issues and concerns regarding PD. In fact, on numerous occasions they raised concerns about their PD experiences not matching the level of depth or rigor needed to support the educational policies, such as the College and Career Ready Standards (CCR) and the adopted Hawaii Common Core State Standards (CCSS) required of them.

I feel that it is important to explain my personal connection to this research study. As a former classroom teacher, I could relate with the teachers' frustrations of being required to successfully implement new initiatives in their classrooms, but not feeling adequately supported to do so. When I was in the classroom, I wanted to be the best teacher that I could be for my students. I attended every possible literacy PD so I could build my own pedagogical knowledge with the goal to better support students in their learning process of these new practices. However, my experiences attending the PDs that my district would offer were often disappointing. Disappointing in the sense that I already knew the content, which then felt like a waste of time, or the content was so over my head (in terms of where my understanding was in the instructional practice) that I could not grasp it in the 1-2 day workshop. Therefore, I often felt unable to

implement it in my own classroom. I remember always being motivated to try one or two basic strategies learned, but often found myself (my practice) resorting back to business as usual in a few weeks. Some of this was because I did not feel that I was given an adequate amount of time to engage in deep learning of the instructional strategies to be able to transfer them to my classroom practice. Another issue I faced was isolation, which meant I often worked alone in implementing the practice. Although I attended PDs with some of my grade level peers, the administration did not create a time and space to collaborate with one another after the PDs ended. After over a decade of teaching I moved to my current position at the district level.

As the content literacy specialist, I have the ability to design professional learning opportunities for teachers that address the issues I experienced with PDs. When the CCSS arrived in 2010 teachers shared even more frustrations and I knew that implementing new policies and expectations demanded new ways of learning. The literature confirms these issues as well. A survey of 40 state education agencies showed that education leaders in 37 states have struggled to provide the type of PD needed to implement the CCSS literacy standards (Kober, McIntosh, & Rentner, 2013). Moreover, a 2013-2014 survey conducted by the National Center for Literacy Education (NCLE) asked more than 300 U.S. educators across all roles, grade levels, and subject areas what kinds of opportunities they have had to learn about the CCSS literacy standards. A key finding from the survey was that "nationwide, most teachers do not yet feel well prepared to implement the new literacy standards, especially with high-needs students" (NCLE, 2014, p.10). And in Hawaii, Frambaugh-Kritzer and Bartlett (2016) found a similar urgent need for teacher PD in Hawaii:

> Most of the teachers expressed anxiety and concern surrounding the Common Core State Standards (Common Core State Standards Initiative, 2010/2016). In particular, the

> teachers expressed that they had learned little about CCSS outside our graduate reading certificate program. Therefore, in this context, the teachers believed the need for literacy coaches was unprecedented. For example, one teacher responded during the focus interview: "I believe that there should be literacy coaches on all campuses to help teachers begin to understand the importance of literacy in regard to the CCSS." And another one stated in the questionnaire: "I definitely think they (literacy coaches) are needed, especially since the Common Core Standards. Most of us were taught to teach our content and not literacy along with our content. So, I think the specialists will do that justice." (p. 51)

The majority of the teachers in Frambaugh-Kritzer and Bartlett's (2016) study reported feeling pressured to meet the new level of performance expected when implementing the CCSS literacy standards and expressed the need for additional professional learning support through literacy coaching.

These studies align with my actions because beginning in 2011, I began researching various models that supported ongoing collaborative teacher learning at the school level, especially evidence-based models that transferred to students' learning. After synthesizing the literature and attending numerous conference sessions on best practices that aligned with the current educational policies, I was inspired to create the Hawaii Lab Cohort (HLC) model (explained fully in Chapter 3). My first inspiration for the HLC derived from attending a presentation at the 2013 NCTE conference by Dr. Cynthia Merrill and her co-presenters, all of whom were 'lab teachers'. After hearing the teachers' positive testimonies, I knew I wanted to implement something similar in Hawaii.

When I reviewed the related literature, I also came to realize that I'm not alone in trying to find a more effective PD experience to implement. Research on teacher learning and development since 2000 has shown that, like me and the teachers I work with, teachers nationally are tired of the "one-shot,"(Lambson, 2007, p. 8), "sit and get" approach to teacher PD; no matter how dynamic, it is insufficient (Darling-Hammond, 2010). In fact, these types of PDs do not always lead to professional learning despite their intent (Fullan, 2007). The activities are not necessarily useless, but Fullan (2007) argued they can never be "powerful enough, specific enough, or sustained enough to alter the culture of the classroom and school" (p. 35).

However, the literature offers many solutions for more effective PD. One I'm attracted to is termed Teacher Learning Communities (TLC), just like Cynthia Merrill's work that I discovered at NCTE. It is important to note that TLC structures have been created under various names that share similar characteristics, such as Community of Practice (Lave & Wenger, 1991), Teachers as Researchers (Lytle & Cochran-Smith, 1992), Critical Friends (Costa & Kallick, 1993), Lesson Study (Fernandez, 2002; Lewis, 1998; Stigler & Hiebert, 2009), Professional Learning Community (DuFour & Eaker, 1998), Collaborative Teacher Study Groups (Feiman-Nemser, 2001), Teacher Communities (Graham, 2007); Critical Friends Group (Curry, 2008), and Community of Teachers (Starnes, Saderholm, & Webb, 2010). All of these structures are nuanced in what they provide teachers. Regardless of the label, all share the qualities noted in NCTE's (2010) definition of a TLC. The 2010 NCTE policy brief, *Teacher Learning Communities,* stated that TLCs are defined as groups of teachers who "continually inquire into their practice and, as a result, discover, create, and negotiate new meaning and improve their practice" (p. 1). This definition anchors my understanding of a TLC.

Another common theme in TLCs is teachers "work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes" (McLaughlin & Talbert, 2006, p. 4). Furthermore, when TLCs are implemented as a sustained, job-embedded approach to teacher learning, this model can enhance teacher quality (DuFour & Eaker, 1998; McLaughlin & Talbert, 2006; Skerrett, 2010), which is a factor in enhancing student achievement. In fact, decades of research have shown that TLCs, as a vehicle for professional development, improve teaching, learning, and collaboration (Cochran-Smith & Lytle, 1999; Darling-Hammond, 1998; Darling-Hammond et al., 2009; DuFour & Eaker, 1998; Grossman, Wineburg, Woolworth, 2001; Horn & Little, 2010; Levine & Marcus, 2010; McLaughlin & Talbert, 2006). Yet, no TLC is the same as they all take on different nuances for a variety of reasons.

As a result of my review of the published research I also wondered, if decades of research has already shown TLCs to be effective, why was I not seeing more TLCs as a form of PD being used in the (HIDOE) schools that I was working with, especially when the state HIDOE supported this initiative? As indicated in the HIDOE ESSA document, TLCs align with the vision of the HIDOE to provide "focused, ongoing and sustained professional development to support the professional growth, improvement, and advancement of teachers" with their peers (HIESSA, p. 74). Further, teacher collaboration was regarded as one of the high-leverage action items embedded in the HIDOE's *Implementation Plan 2017-2020*, with goals to "prioritize professional growth to opportunities" for teacher learning, "develop/expand communities of practice around critical, timely issues with teachers," and "support teacher–community collaboration practices" (Hawaii State Department of Education). Although TLCs (i.e., learning

communities) were not new to education, their implementation in the HIDOE schools as a vehicle for PD was fairly new and at times were not always consistently implemented in ways that reflect how they were initially designed to be used. Therefore, schools did not always get the results that were expected. Many times, from my own experience, teacher groups were constructed and held the label of a learning community as a structure, but still lacked some or many of the attributes that would truly qualify them as such (i.e., voluntary collaboration, looking at student work, creating norms of collaboration).

What makes my study unique is I synthesized all the previous research accomplished thus far on effective PD and designed and implemented my own model. Again, an overview of this model will be shared in full in Chapter 3. As a researcher of my own model, I want to understand the teacher participants' overall experiences, the study's impact on their instructional literacy practices, and their perceptions of how their participation impacted students' literacy growth. I felt this to be important in order to discover which parts of the model the teachers felt supported their own literacy learning. I also would also like to use this study as an opportunity to examine my own practice as a literacy specialist, more specifically how the design of my model has incorporated my beliefs about teaching and learning.

While my study is unique and will grow the literature, it would not be possible without drawing on numerous studies that showed teachers' learning experiences have greater impact when designed collaboratively in the form of a learning community (Darling-Hammond 1999; Darling-Hammond & Richardson, 2009; McLaughlin & Zarrow, 2001; Garet, et al., 2001) to influence student learning (Darling-Hammond, 1998; Desimone, Smith & Phillips, 2013) and the body of literature that examines learning communities as an effective PD model for teacher learning (Darling-Hammond & Richardson, 2009; Phillips, 2003; Hollins, et. al, 2004; Wilson &

Berne, 1999, McConnell et al., 2013). In total, I identified 59 essential issues that come from peer reviewed scholarship that need to be addressed when designing a TLC model. I highlighted these findings as I built them into my own model (see Chapter 3). Effective PD must address:

- Collaboration and collaborative structures (Webb et al., 2009; Graham, 2007; DuFour & DuFour, 2010; Darling-Hammond, 2011; Darling-Hammond, Hyler, Gardner, 2017; Murphy, 2012; Al-Taneiji, 2009)
- Job embedded (Hord, 1997; Little, 1990; DuFour & Eaker, 1998; McLaughlin & Talbert, 2006; Skerrett, 2010; DuFour & DuFour, 2004; Darling-Hammond, 1998; McLaughlin & Talbert, 2006; Rosenholtz, 1989; Croft, Coggshall, Dolan, & Powers, 2010).
- Ongoing, over an extended period of time (Darling-Hammond, 2011; Wei, Darling-Hammond, & Adamson, 2010; Mizell, 2010; Sims and Penny, 2014).
- Promotes Shared Leadership among Members (Kennedy, Deuel, Nelson, and Slavit, 2011; Graham, 2007; Phillips, 2003; Chow, 2016)
- Voluntary participation and choice in a professional learning community (DiMarco & Guastello, 2019; Gates & Gates, 2014; Scott, Clarkson, & McDonough, 2011)
- Active learning (Trotter, 2006; Desimone, 2009; Darling-Hammond, Hyler, Gardner, 2017; Snow-Renner & Lauer, 2005; Garet et al., 2001).
- Models of effective practice (Joyce & Showers, 2002; Heller et al., 2012; Sweeney, 2003); Darling-Hammond, Hyler, Gardner, 2017; Hord, 1997).
- Coaching and expert support (Showers, 1985; Joyce & Showers, 2002; Darling-Hammond, Hyler, Gardner, 2017; Frambaugh-Kritzer & Bartlett, 2016; Biancarosa, Bryk, & Dexter, 2010).

- Content-focused (Brownell et al., 2017; Darling-Hammond, Hyler, Gardner, 2017; Desimone, 2009; Yoon et al., 2007).
- Supportive/trusting environment/conditions-structures/relationships (Webb et al., 2009; McLaughlin, 1993; Hord, 1997; Boone, 2010; Venables, 2011; Darling-Hammond & Richardson, 2009; Short and Burke, 1991).
- Inquiry-based culture (Kennedy, Deuel, Nelson, and Slavit, 2011)
- Collective learning and application (DuFour & Eaker, 1998; Stoll et al., 2006; Cochran-Smith & Lytle, 2001; Cunningham, 2011; Lambson, 2007).
- Time for professional discussion and reflection (DuFour, 2004, Graham, 2007; Duggins, 2014; Darling-Hammond & Richardson, 2009; Phillips, 2003; Poovey et al., 2012).
- Relevant to 21st century educational policy demands (Borko, 2004; CITE More
- Not over-reliant on outside resources or external experts (Boone, 2010; Westheimer, 2008)
- Teacher agency (Riveros, Newton, & Burgess, 2012; Biesta, Priestley, & Robinson, 2015; D'Ardenne et al., 2013; Gallagher al et., 2011;
- Structured protocols (Heller, 2012; Clarke, 2009; Boone, 2010)
- Personalized to Hawaii's demographics (Inouye et al., 2019)

My study is timely and warranted. I have yet to find any empirical studies that examine all the features bulleted above. And I have yet to find a study that examines what happens when a literacy specialist researches and creates a unique model and then facilitates and further researches it with a cohort of literacy teachers.

Theoretical Framework

The theoretical framework underpinning this study is constructivism, especially social constructivism (Vygotsky, 1978). Constructivism is a theory of knowledge (epistemology) in which humans generate knowledge and meaning from the interactions between their experience and their ideas about that experience (Vygotsky, 1962, as cited in Fosnot, 2013). Social constructivism states that knowledge is constructed based on personal experiences and hypotheses (testing) of the environment, indicating that each person will have a different interpretation and construction of the knowledge depending on one's past cognitive experiences and cultural factors that one brings to a situation (Gregory, 2016). Vygotsky agreed that cognitive structures support the learning process, but argued that the "social, interpersonal aspects of learning precede the individual, intrapersonal aspects" (Duffy & Cunningham, 1996, p. 13).

This study draws upon additional learning theories derived from social constructivism, such as situated learning and communities of practice. Lave and Wenger (1991) argued that all learning is situated; that is, embedded within some sort of activity, context, and culture. Social interaction and collaboration are two essential components of situated learning. Thus, situated learning often involves learners engaged in a "community of practice" that embodies similar beliefs, intentions (goals), and behaviors to be acquired (Gregory, 2016). Wenger (1998) summarizes Communities of Practice (CoP) as "groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (p. 45).

These frames provided a foundation for my study and a framework for the creation of the HLC model. Each theoretical lens is more fully elaborated in Chapter 2.

Research Questions

In my journey of unpacking the PD issues and coming to offer solutions, I ask the following question and sub-questions in this combined action research case study:

What happens when five teachers participate in a TLC (Hawaii Lab Cohort) for one academic school year to learn about literacy instructional methods?

Sub questions:

1. How do teachers describe their experiences from their overall participation in the TLC?
2. How does participation in a TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?
3. What are teachers' perceptions of students' literacy growth?
4. How do I align my beliefs with my practices with teaching and learning?

CHAPTER 2. THEORETICAL FRAMEWORK AND REVIEW OF LITERATURE

I begin this chapter with the theoretical underpinnings that inform this study: (a) constructivism theory, (b) cognitive apprentice theory (i.e., situated learning theory), and (c) Communities of Practice (CoPs) learning theory. I will follow the theoretical framework by a review of the literature on concepts central to this study: (a) teacher learning and the relationship of knowledge and practice in the area of literacy, (b) learning communities in education with an emphasis on TLCs, (c) literacy instruction PD and design for 21st-century teaching and learning, (d) and, professional development models of literacy instruction.

Constructivism

Numerous scholars (Duffy & Cunningham, 1996; Pearson & Gallagher, 1983; Powell & Kalina, 2009) have addressed the importance of incorporating constructivist principles into the design of teacher PD. They attribute this importance to how learners actively construct knowledge through interactions in their environment as individuals and as members of groups. In terms of professional development, the literature from the past decade has emphasized the importance of community as a context for that learning to occur.

Constructivism is a theory of knowledge (epistemology) in which humans generate knowledge and meaning from the interactions between their experience and their ideas about that experience (Vygotsky, 1962, as cited by Fosnot, 2013). Learning is viewed as the active process of constructing rather than acquiring knowledge, and instruction serves as a process to help the learner construct rather than merely acquire knowledge (Duffy & Cunningham, 1996). In contrast to behaviorists (e.g., Skinner), constructivists view learning as active in a context. The two main approaches to the theory of constructivism are cognitive constructivism and social constructivism, which contribute to situated learning (i.e., learning in the classroom). Both of

these areas of constructivism support the purpose of this study: an inquiry into the way teachers construct literacy learning through their participation in a TLC. Because constructivism and the learning process are highly complex, the branches of each, such as ZPD, inquiry, and active learning, are relevant to the current study.

Cognitive Constructivism

The foundations of cognitive constructivism are often associated with the work of Piaget and Vygotsky. Although both believed that learning is constructed as learners use their own knowledge, they differed on approaches to learning. According to Piaget's theory of cognitive development, learners use cognitive structures (schemas) to interpret their environment; in doing so they assimilate new information into their existing cognitive schemas, which then lead to modification of these cognitive structures (Duffy & Cunningham, 1996). By contrast Vygotsky focused on the effect that social interaction (environment and culture) had on learning. This theory of the use of cognitive structures is important for the current study because research has shown that learning is best supported when creative and critical thinking is situated and applied to real-world contexts (e.g., teachers discussing problems of practice in their own classrooms) (Kucer, 2008).

Social Constructivism

In the area of education, social constructivism has been viewed as a method of teaching from which everyone can benefit because collaboration and social interaction are highly encouraged. Vygotsky agreed that cognitive structures support the learning process but argued that the "social, interpersonal aspects of learning precede the individual, intrapersonal aspects" (Duffy & Cunningham, 1996, p. 13). The dialogic nature of learning—learning through dialogue—became Vygotsky's focus and the foundation for social constructivism. This approach

is critical for professional discourse with adult learners in a TLC because it supports teachers sharing their learning experiences (i.e., problems of practice) and provides one another feedback to grow and adapt their instructional practice in the classroom (Trotter, 2006).

Another aspect to consider in social constructivism is that ideas are constructed with all those involved in the environment (Powell & Kalina, 2009), a concept important to a TLC approach to professional learning because teachers co-construct their learning experiences together to exchange and create new knowledge. Vygotsky believed that learning requires social interaction (teacher to teacher or mentor to teacher) and active learning (learning by doing), since learning is best internalized when experienced (Vygotsky, 1962, as cited by Powell & Kalina, 2009). Active learning in particular plays a critical role in TLCs because teachers learn by doing in their classrooms and by observing one another's instructional practices.

Zone of Proximal Development. The theory of Vygotsky (1962) most emphasized in education is the zone of proximal development (ZPD), which he defined as a space in which a child is assisted in learning a concept with attention to what she or he can do with and without help. Once students achieve the goal of their activity, their zone grows larger; they are then able to do more on their own. Adults learn in much the same way. Built upon Vygotsky's ZPD theory, the gradual release of responsibility model (Pearson & Gallagher, 1983) can be easily adapted for adult learners, including teachers. According to this theory the learning process begins by watching someone (i.e., a teacher, mentor, coach) model a strategy. Then learners practice it with some scaffolding, such as working with the instructor or in pairs or groups; ultimately, they are given time to practice and apply their learning over time with feedback in a variety of contexts. In essence, they learn by doing.

Learning by doing was introduced by Dewey (1916), who advocated for an inquiry approach to learning and saw the role of the teacher as a facilitator who presented a problem or situation while helping students to collect data, solve problems, and test their conclusions. Dewey's inquiry learning theory states:

> guided forms of teaching or facilitation are necessary, as students construct their own concepts and understanding of what is being taught. Students need guidance when teachers explain complex topics and knowledge has to be brought out of them since they have their own experience to draw on. (Powell & Kalina, 2009, p. 246)

Although theorists have taken various stances on constructivism, one concept runs through all of them: the way this theory applies to teaching and learning in the classroom. Active learning is key.

Active learning. Active learning, also known as student-centered learning, incorporates methods of teaching in which the focus of instruction shifts from teacher to student (Hannafin & Hannafin, 2010). According to constructivists like Piaget, Vygotsky, and Dewey, meaning is derived from and interpreted through individual beliefs, experiences, and social and cultural contexts. A student-centered learning environment is a place where "learners engage in complex and relevant activities, collaborate with peers, and employ resources to collect, analyze, and represent information" (Hannafin & Hannafin, 2010, p. 13). Student-centered learning environments come from authentic experiences and purposes, facilitating interaction and learning. In these contexts, learners identify their own learning goals, form and test hypotheses, and try out their learning in realistic settings (i.e., teacher's classroom) (Hannafin & Hannafin, 2010).

Although active learning was developed with children in mind, the intersections that occur with adult learning theory increase the importance of considering the design of the activities in which the TLC would participate (Thompson, 2001). Research has shown that knowledge is constructed while learners engage in activities and give and receive feedback on their goal; this approach to learning can provide a context in which they seek out the resources and information needed to attain that goal, furthering their own learning process (Hannafin & Hannafin, 2010). Teachers participating in a TLC must be given the opportunity to identify their own learning goals and give and receive feedback on their progress in achieving those goals with group members. This theory was important in the design of the HLC model in the current study because it allowed for the incorporation of active learning opportunities for teachers.

Cognitive Apprenticeship/Situated Learning Theory

The theory of cognitive apprenticeship, also of prime importance in this study, brings the learning of a process or skill out in the open, under the assumption that people learn from one another through observation, imitation, and modeling (Collins, Brown, & Newman, 1989). "Cognitive apprenticeship methods try to enculturate the learner into authentic practices through authentic activity and social interactions in a way similar to that which is evident—and evidently successful in craft apprenticeship" (Brown, Collins, Duguid, & Seely, 2007, p. 10). Under the umbrella of cognitive apprenticeship is the theory of situated cognition (or learning), which refers to the idea that cognitive processes are situated (i.e., located) in a physical and social context (Greeno, Collins, & Resnick, 1996), involving relations between the person and a situation, not merely what resides in the person's mind. Thus, situated learning is often described as enculturation, in which the learner adapts to the norms, skills, beliefs, language, and attitudes of a particular community (Lave & Wenger, 1991). This approach to learning must be situated in

authentic environments as a part of social interaction among all practitioners in the group, pointing to the branch theory of situated learning.

Situated learning, rooted in Vygotsky's notion of learning through social constructivism, also emphasizes the relational interdependency of the learner and the world, activity, meaning, cognition, learning, and knowing (Lave & Wenger, 1991). Lave (1991) independently went on to say that "Learning, thinking, and knowing are relations among people engaged in activity in, with, and arising from the socially and culturally structured world" (p. 67); in other words, learning is situated and can be unintentional as well as deliberate.

Social interaction and collaboration are two essential components in the theory of situated learning, in which learning is a process taking place in the context of specific communities of practice. When all learners involved hold similar beliefs and desires to achieve the same goals, they become active and engaged in the culture of the community and will eventually assume the role of expert (Lave & Wenger, 1991), thus supporting job-embedded professional learning for teachers that will enhance teacher quality in the classroom (Darling-Hammond et al., 2009). This theory was important to the current study because the teachers in the HLC voluntarily came together to form a learning community around a similar area of interest and learned together through social discourse in the contexts of their own classrooms.

The literature on situated learning has influenced teacher educators and researchers who have created models for teacher learning at the school level (Lave & Wenger, 1991). The need for this approach has become particularly important since the 1990s because of the mismatch between what teachers are taught in theory and what they experience in practice (Anderson, Reder, & Simon, 1996; Cochran-Smith, 2003; Grossman, 2008). The most widely known umbrella model used in education is the learning community (Senge, 1990; Barth, 1990);

however, all learning communities notably derive from community of practice theory, the final theory used to support this study.

Communities of Practice Learning Theory

Communities of practice (CoP) have existed for as long as humans have worked in groups to accomplish shared goals; in fact, they are so common in everyday life that they can be virtually unnoticed (Lave & Wenger, 1991). The CoP theory originated with Lave and Wenger (1991), who coined the term while studying apprenticeship as a learning model (Gregory, 2016; Wenger-Trayner & Wenger-Trayner, 2015). In building on situated learning, which is the relationship between learning and the social situations in which it occurs, learning requires social co-participation, which involves the process of engagement in a community as a context for learning (Lave & Wenger, 1991).

CoPs were initially defined as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger, McDermott, & Snyder, 2002, p. 176). The definition was later expanded to include groups of people who share a particular concern or a passion for what they do and want to deepen their knowledge and expertise or set of skills by being a part of the group (Wenger-Trayner & Wenger-Trayner, 2015).

CoPs have been used historically as vehicles for knowledge-based social structures from ancient times to the Industrial Revolution, but what distinguishes the current (a contemporary) use of CoPs in larger organizations such as the Department of Education (DOE) is in part a result of the view of knowledge as a commodity in 21st-century learning (Wenger & Snyder, 2000). The social capital that resides in the CoP, the power and resources that exist in the social network, can lead to changes in the behavior of the participants that would benefit the

organization (Lesser & Storck, 2001). Cultivating CoPs strategically in organizations can be a practical and economical way to manage knowledge as asset (Wenger, 1998); however, learning can be only one of many reasons a community might come together, so not every community of learners is a CoP; intention, in part, defines contemporary CoPs. Key characteristics as they relate to the current study appear in the next section.

Key Characteristics of Communities of Practice

Three critical characteristics of a CoP are: (a) mutual engagement and identity defined by a shared domain of interest (domain), (b) joint activities and discussions during which members help and learn from one another (community), and (c) a shared repertoire of communal resources that members have developed over time (practice) (Wenger, 1998, pp. 73–84). All these characteristics are elements of the HLC, which are central to this study.

The domain. A true CoP is more than a club or a network of friends coming together around a particular issue or interest. Members share a particular identity defined by a shared domain, "a shared competence" that distinguishes them from those outside the group (Wenger-Trayner & Wenger-Trayner, 2015). What is most important here is that the members value their collective competence and learn from one another even if people outside the group may not recognize this value (Wenger, 1998).

The community. As members move together in pursuing a particular area of interest in their domain, they engage in activities and discussions centered around helping and learning from one another (Wenger-Trayner & Wenger-Trayner, 2015). In fact, a focus on personal relationships is essential to the learning process of the group; members build relationships with one another and care about their standing among their colleagues (Lave & Wenger, 1991). Their mere identification with the domain is insufficient to sustain the group; having the same job or

title does not make for a community of practice (Lave & Wenger, 1991). Relationships are essential because they help to build trust and resources to support the learning that occurs in the group.

The practice. Members of a CoP are practitioners who come together to develop a repertoire of resources—experiences, stories, tools, ways of addressing problems, creating new approaches—in a shared practice (Wenger-Trayner & Wenger-Trayner, 2015). Doing so requires time and adds value to membership in the group. Internal sharing over time truly builds a CoP (Wenger & Snyder, 2000).

Situated Learning in Communities of Practice in the Field of Education

Since the 1990s teacher collaboration has been the focus at schools to support student achievement (McLaughlin, 1993; McLaughlin & Talbert, 2006); however, placing an emphasis on teacher collaboration to improve the quality of student learning and other school reform efforts is not new to education. Dewey (1916) argued that when teachers were given an opportunity to reflect on their teaching practices, the entire school benefited. Reflection is not an isolated activity, but the product of social practices embedded in community settings. Research has clearly shown that human learning is social, and that people learn by doing (Wenger, 1998; Dewey, 1916). This emphasis on teachers learning through participation in a community is important for the current study because professional teacher learning "is rooted in the human need to feel a sense of belonging and of making a contribution to a community where experience and knowledge function as part of community property" (Lieberman & Pointer Mace, 2008, p. 227). Simply acknowledging one's identity as part of a CoP is foundational to teacher learning.

Lave and Wenger (1991) emphasized that all situated learning is located in a CoP because the community provides the setting for the social interaction needed to engage in a dialogue with

others around a similar purpose or goal. In this joining of practice, the community provides a place for member analysis and reflection in order to create shared knowledge (experiences) and resources to support all members in working toward their individual goal of learning (Wenger, 1998). At many schools CoPs have been helpful in defining the "private practice" of teaching (Fullan, 2007) and serve as places where teachers can learn from one another, observe other teachers (practitioners), and reflect upon their instructional practices to improve with support from the group (Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Darling-Hammond, 2011; Wenger et al., 2002).

One of the first applications of CoPs in an educational setting was in teacher training and peer-to-peer professional development activities (Wenger-Trayner & Wenger-Trayner, 2015). In this application teachers learned in their own classrooms (i.e., situated learning) with support from other practitioners in CoPs. This type of approach provides (a) an authentic environment in which learning and access to the cognition of the community take place and (b) resources to learners that may support their ability to co-construct their new learning in their daily practice (Langer, 2009). Furthermore, CoPs can also work to empower teachers to take responsibility for their own learning and help one another extend their professional practice as active participants in the learning process (Kaschak & Letwinsky, 2015).

The key characteristics of what constitutes situated learning in a CoP connect with and enhance the work done in TLCs through mutual engagement, joint enterprise, and shared repertoire.

Mutual engagement (domain). "Practice does not exist in the abstract. It exists because people are engaged in actions whose meanings they negotiate with one another," serving the interest of the community members (Wenger, 1998, p. 73). CoPs provide a space for teachers to

come together voluntarily to address a common interest or problem of practice related to student learning. This mutual engagement in the learning process provides the members a sense of belonging essential to any professional learning community (Wenger, 1998). Together members negotiate a shared purpose for their work together (Hord, 1997; National Council of Teachers of English [NCTE], 2010). Agreement about what actions their group will take give the group a purpose and bring the CoP into being. CoPs are created by the behaviors of the members at the same time as they shape that behavior (Kimble, Hildreth, & Bourdon, 2008); in other words in both a CoP and a TLC, members must commit to the Same guiding principles (i.e., mission, vision, and values) of the group in order to come into existence as an effective community.

Joint enterprise. Joint enterprise is a shared goal that arises out of negotiation; the process of pursuing it creates a pattern of mutual accountability (Wenger, 1998, pp. 77–78); that is, the community decides what they want to accomplish and how they will hold others accountable in the group. In a TLC the joint enterprise often involves improving the quality of instruction, therefore the methods that members choose may change over time depending on the focus of the group (Kimble et al., 2008).

Joint enterprise in a CoP also speaks to the notion of mutual accountability of all members of the group. On the surface, this is the responsibility that members assume to work "effectively and efficiently towards the negotiated goal" (Kimble et al., 2008, p. 27); however, an expectation is also placed on adhering to the norms of behavior of the group. Because TLCs are action-oriented, collective agreements contribute to focusing the members (educators) on how each person can contribute (i.e., what role they will play), creating an internal focus for the group (what members stand for) (DuFour, DuFour, & Eaker, 2012).

> When educators shift their dialogue from common complaints to collective commitments, they move from a focus on "them" to a focus on "we," from a focus on what others must do to improve the situation to a focus on what we can do to make the school or district a better place. (DuFour, DuFour, & Eaker, 2012, p. 77)

This speaks to one of the most important elements of a CoP, the value that the members give to the group's focus (Wenger, 1998). Much of the research on situated learning has shown that identity cannot be separated from the learning process and must be considered an important component. The importance of members' identity is associated with the community and the desire to become "knowledgeably skillful" as a part of supporting the learning process (Lave, 1991, p.111). The value that members attribute to the group has an impact on the mutual engagement of the community, the relationships formed, and the resources it needs to fuel its efforts to create a positive impact on the outcome.

Shared repertoire. In a CoP the repertoire "includes routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions or concepts that the community has produced or adopted in the course of its existence and which has become part of its practice" (Wenger, 1998, p. 83); but the repertoire is not static. Instead it evolves over time as the group evolves (Kimble et al., 2008). In TLCs, members identify a specific practice that they would like to explore with one another (Joyce & Showers, 1982). These shared resources work to address their area of focus as well as help to shape professional learning and knowledge of the community. In a TLC, shared repertoire, which aligns with the nature of collaboration—the sharing of knowledge—is emphasized through professional dialogue. TLCs can create a culture of learning at a school by providing the momentum to fuel continued improvement and enhance the skills of the whole, rather than just an individual (Darling-Hammond, 2011; DuFour & Eaker, 1998).

For all the benefits a CoP can offer, the research has shown many limitations on learning as well; this caution is essential.

Limitations of Learning in a Community of Practice

When an individual becomes a member of a CoP, an expectation is placed on how that person will act, what meaning the group will attach to his or her actions as well as the meaning he or she will attach to others' actions in the group in return for a place in a particular community (Wenger, 1998).

> The elements of mutual engagement, joint enterprises and shared repertoire all fit together and reinforce each other, weaving a mesh that is fairly flexible but still capable of constraint, this defines the action and activity of the group members and their identity within the group. (Kimble et al., 2008, p. 28)

This again reinforces the value that the members give to the community (Wenger, 1998) because participation in a CoP is voluntary and lasts as long as individual members are interested in remaining with the group (Wenger et al., 2002).

Another issue raised with regard to the limitations of a CoP in an educational setting is that it has no predetermined moral content and offers only descriptions of processes that may occur in a community of humans in any given circumstances (Kimble et al., 2008). A CoP is "only as good or useful as [its] products are good or useful" (Kimble et al., 2008, p. 29). In the context of teaching and learning in education, members of the community may not want to look outside the group (i.e., third-party research) to gain knowledge and resources. This could prove to be problematic in the context of a TLC, especially if members in the group do not share high expertise in the skill or strategy that they are trying to implement. If the group strongly identifies with its purpose, they can overlook outside wisdom or resist ideas from outside their network, a

situation that can impact the rate of change or growth in the group (Grossman, Wineburg, & Woolworth, 2001; Kimble et al., 2008) as well as the rate of learning that occurs in the group.

> When a community makes learning a central part of its enterprise, useful wisdom is not concentrated at the core of its practice. There is a wisdom of peripherality—a view of the community that can be lost to full participants. It includes paths not taken, connections overlooked, choices taken for granted.... It can easily become marginalized within established regimes of competence. (Wenger, 1998, p. 216)

These limitations informed my work with HLC. In other words, an awareness of possible obstacles helped me to plan for possible solutions to support productive learning in the community.

LITERATURE REVIEW

Research using a variety of methods and contexts has demonstrated that effective professional development results in improvements to teachers' content knowledge and instructional practice as well as improved student learning outcomes (Darling-Hammond et al., 2009). Although student outcomes are important indicators of the PD received, the impact on increasing teacher knowledge and instructional practice is equally relevant because student achievement is not always immediate (Darling-Hammond et al., 2009). Teacher PD has been considered a critical component for deepening teachers' content knowledge and pedagogy, which in turn impacts their practices (Garet, Porter, Desimone, Birman, & Yoon, 2001).

Due to the research making it evident that teachers play a role in enhancing the quality of education that students receive (Cochran-Smith, 2003; Liston, Borko & Whitcomb, 2008), teacher learning has been an important focus in education since the 1990s. Teachers who know more are assumed to teach better; thus, radically differing views of teacher learning must be considered. Considerations of teacher learning should include teacher knowledge, professional practice, contexts that support teacher learning, and the ways in which teacher learning is linked to educational change (Cochran-Smith & Lytle, 1999, p. 249).

Any increase in teacher learning is often attributed to the way the PD has been designed. In a national survey conducted by the Department of Education in 2007, teachers reported that their knowledge and skills grew (teacher practices changed) when they received PD that was coherent, focused on content knowledge, and involved active learning (Yoon, Duncan, Lee, Scarloss & Shapley, 2007).

Cochran-Smith and Lytle (2001) suggest that PD is more than just skill building among teachers; it is a process of community building. This community building is most effective when

the PD is located in the school and related to teachers' daily classroom practice (McLaughlin & Zarrow, 2001). In fact, the ultimate purpose of teacher PD under ESSA (2015) is linked to more collaborative and personalized approach to professional learning and practice, as well as student learning. At this time, I could not also find any empirical studies examining TLC anchored in a community of practice in the midst of policy changes such as ESSA or CCSS.

Over the past two decades, there has been a growing consensus that teacher learning communities (i.e., communities of practice) when implemented at the school level can offer an ongoing setting for teacher learning (Grossman, Wineburg & Woolworth, 2000). For example, Murphy (2012) found that ongoing collaboration among peers was critical for teacher learning that impacted students' academic gains. In the end, when teachers come together collectively around a similar goal or interest, in order to share knowledge and create new knowledge together, while actively engaging in supporting one another's professional growth, the conditions for quality teaching and learning are strengthened (Little, 2003; Darling-Hammond & Richardson, 2009; Darling-Hammond al et., 2009; Darling-Hammond, Hyler, & Gardner, 2017).

In my synthesis, I was pleased to see that many studies have already determined teachers' learning experiences have greater impact when designed collaboratively in the form of a learning community, and this learning can have influence on student learning. However, none of these studies have explored a learning community model that uses the design elements for effective teacher PD for the 21st century which presents a gap addressed by my inquiry.

This literature review focuses on the following relevant concepts which include (a) the characteristics of effective professional development (b) teacher learning and relationship of knowledge of practice, (c) characteristics of effective teacher learning communities (TLCs), and finally (d) professional development models of literacy instruction.

The Characteristics of Effective Teacher Professional Development

Although there are several PD models, many PD initiatives fail to meet the goal of being high quality, distinguished by PD that is collaborative, timely, ongoing, and multifaceted for teachers and principals (Partnership for 21st Century Learning, 2009). A report, called *Effective Teacher Professional Development* (2017) synthesized 35 methodologically rigorous studies that have demonstrated a positive link between professional development, teaching practices, and student outcomes identified seven elements of effective professional development for the 21st century (Darling-Hammond, Hyler, & Gardner, 2017). According to the study, PDs should (a) be content-focused, (b) incorporate active learning utilizing adult learning theory, (c) support collaboration, typically in job-embedded contexts, (d) use models and modeling of effective practice, (e) provide coaching and expert support, (f) offer opportunities for feedback and reflection, and (g) be of sustained duration (Darling-Hammond, Hyler, Gardner, 2017, p. 4). Although successful PD models may feature many of these elements, I was not able to find any empirical studies that used all of these components simultaneously (Darling-Hammond et al., 2017). Next, I describe the elements, because they have also informed the framework and refinement of the design of the HLC model examined in the current study.

Content focus. Content-focused PD places a focus on discipline-specific curricula, is most often job-embedded, and provides multiple opportunities for teachers to study their students' work, test a new strategy or skill, or study an element of pedagogy or student learning specific to that content area (Darling-Hammond et al., 2017). Professional learning opportunities that are context-specific, job-embedded, and content-based are particularly important in addressing the diverse needs of students in a variety of settings. For example, a three-year longitudinal study, conducted by the U.S Department of Education for the Longitudinal

Evaluation of School Change and Performance (LESCP), on elementary teachers and students from 71 high-poverty schools in 18 districts in seven states discovered that PD that was content focused (in Year 1) contributed to student achievement growth. Specifically, teachers were more likely to teach advanced topics and emphasize problem solving (Desimone, Smith, & Phillips, 2013). Their findings offer modest support for content-focused PD.

Active learning. Designers of PD experiences, however, must consider not only content but pedagogy. PD experiences can be designed in several ways to support what adult learning theories have shown are most effective for teacher learning:

- Adults come to learning with past experiences that can be used as resources for new knowledge.
- Adults need choice in their learning opportunities based on individual interest and needs.
- Reflection and inquiry should always be central to learning and development. (Trotter, 2006)

Connections to prior learning, choice, and reflection contribute to effective PDs.

All of these attributes point to the importance of active learning, a finding which has been confirmed elsewhere. In a three-year longitudinal study, which included a select sample of 207 teachers from 30 schools in 10 districts within five states, researchers examined the characteristics of teachers' professional development and its impact on teaching practices in mathematics and science over time. The study found teachers must engage in active learning with colleagues on a regular basis to discuss their work and their students learning in order to develop a deeper understanding of how children think and learn (Desimone, Porter, Garet, Yoon

& Birman, 2002). In other words, the best PDs involve active learning opportunities, where teachers are not passive recipients of information.

The term *active learning* refers to moving away from the traditional models of PD—generic sit-and-lecture—toward a model that engages teachers directly in the learning process. Active learning teacher PD models include opportunities for educators to collaborate using and sharing artifacts, interactive tasks, and other strategies that help to contextualize professional learning (Darling-Hammond, Hyler, Gardner, 2017). Providing opportunities for sense-making activities is an important hallmark of adult learning theory (Snow-Renner & Lauer, 2005). Supporting teacher learning often means incorporating activities that involve modeling specific instructional practices and providing opportunities for them to analyze, try out, and reflect on the use of these practices in their own classroom.

Collaboration. Since all learning is social (Vygotsky, 1978), it makes sense that collaboration is critical to teacher professional learning. "Collaboration supports a togetherness mind-set and develops collective knowledge that extends beyond individual, isolated experiences in classrooms" (Bates & Morgan, 2018, p. 624). Darling-Hammond et al. (2017) defined collaboration in a wide range of configurations--from one-to-one, to small group, to school-wide exchanges with colleagues at or beyond the school walls. An important ingredient for effective collaboration is ensuring that relational trust is built with the members of the community. However, Bates and Morgan (2018) warn that establishing trust takes time: "time to talk, time to understand one another's instructional context and its nuances, and time to collect data on teacher-student interactions, including how students respond to instruction" (p. 624). This is critical to the collaboration process since one of the main reasons for emphasizing or

encouraging teacher collaboration is to promote professional discussions that are solution-oriented and promote inquiry, knowledge building, and sharing.

One example of this type of collaboration comes from a three-year study on the impact of transformative professional development on Hispanic student performance on state mandated science assessments. This study included 21 teachers in two elementary schools (one intervention and one controlled) that participated in a case study where teachers from one school received the transformative professional development model (TPD) intervention that included a focus on Desimone's (2009) core conceptual framework of effective professional development (Johnson & Fargo, 2014). The components of Desimone's framework included: content focus, active learning, coherence, duration, and collective participation. In the school that used the TPD intervention, grade-level PLCs were established and provided 224 hours of professional development to improve science content learning and foster culturally responsive teaching while the other school received no PD model and continued business as usual. The findings of the study demonstrated that the students attending the school whose teachers participated in the TPD model for professional learning showed significantly larger improvements in science achievement over time relative to the students you attended the school with business-as-usual PD from their teachers (p. 856). This study also supports the connection between sustained, collaborative, professional development model that included in Desimone's (2009) core conceptual framework. Loyd's (2006) elementary qualitative case study showed that while collaboration in any learning community is important, planned collaboration time is critical. The study stated:

> Major findings demonstrate that participation in this type of structured collaboration enhanced teacher certainty, causing them to be more resourceful in the application of

> their instructional and assessment skills to promote learning for all students. Teachers' ability and opportunity to reflect were also increased. Teachers' use of formative assessments and their overall assessment literacy benefited as well. As a form of professional staff development, the model demonstrated the efficacy of teacher learning that is relevant to their daily work. Finally, the study revealed plausible evidence that student achievement benefits when teachers collaborate. (Loyd, 2006, para.1)

These findings show how when structured collaboration is provided within a model, predictability and expectations for learning can occur more effectively among members of the group. Planned time for teacher collaboration to occur is essential in sustaining a collaborative culture.

Use of models and modeling. PD that models effective practice best promotes teacher learning and student achievement. Modeling allows teachers to "have a vision of practice on which to anchor their own learning and growth" (Darling-Hammond, Hyler, Gardner, 2017). Bates and Morgan (2018) concur that teachers benefit from seeing instructional practice in action. Whether it be in person, video, or through peer observations, modeling helps to provide a clear picture of the level of rigor, quality, or practice teachers are trying to achieve in their own classroom. Modeling provides the learner criteria for teachers to apply when reflecting on their own practice.

Additionally, teachers sharing and studying artifacts (i.e., student work, teacher lesson plans, rubrics) can also contribute to extending teacher understandings. This touches upon what Darling-Hammond, Hyler, Gardner (2017) have referred to as the "analysis of practice" approach where teachers look at the impact of their practice reflecting together on student work, thinking and behaviors in relations to the model. This analysis approach can help teachers understand

what is working or not working in their classrooms in order to adjust their instruction to meet the needs of their students more effectively (Hattie, 2008).

Coaching and expert support. Teacher professional learning for the 21st century will require guidance and facilitation from experts (e.g., literacy coaches, instructional leaders, university faculty or mentors) in the contexts of their own classrooms. Teachers need guided opportunities to explore, try out and receive feedback on their instruction in order to extend their practice (Bates & Morgan, 2018). The main intent of providing coaching and support in this context is to provide personalized feedback tailored to the teachers needs and strengths. Although this design element includes the word *expert*, this feedback can come from other practitioners (i.e., peers) in a community of practice. What is most critical is that these conversations are grounded in conversations around student data, both academic and behavioral, in order to support future instructional decisions (Bates & Morgan, 2018).

Feedback and reflection. Feedback and reflection may be seen as two distinctive processes, which have often been associated with mentoring and coaching, but are powerful complimentary tools found in effective PD. "Professional development models associated with gains in student learning frequently provide built-in time for teachers to think about, receive input, and makes changes to their practice by providing intentional time for feedback and /or reflection" (Darling-Hammond et al., 2017). The research of Gallagher et al. (2017) demonstrated that effective PD models that generate feedback and that support reflection often include opportunities to share both positive and constructive reactions to the teacher's practice (i.e., lesson plans, instruction, videos). These authentic opportunities for feedback and reflection create richer learning environments for both the teacher and students. Bates and Morgan (2018) highlight the importance of the frequency of these opportunities in order for the feedback to be

helpful. Therefore, the feedback must be timely and viewed as "constructive and not critical" in order to result as instructional goals (p. 625). Time also needs to be built in the PD for teachers to reflect on the feedback. "If suggestions about practice are made and teachers do not spend time thinking about what that means for their individual practice, chances are there will be no resulting change" (Bates & Morgan, 2018, p. 625). This feedback and reflection relate to Schön's theory (1983, 1987) of being a reflective practitioner.

Sustained learning. The final element considers the duration of the learning. Although research has not yet identified a specific duration of time of effective PD models, it has indicated that meaningful professional learning that translates to changed practice cannot be accomplished in short, one-shot workshops (Darling-Hammond et al., 2009; Darling-Hammond et al., 2017; Desimone, 2009; Murphy, 2012). Bates and Morgan (2018) stressed that "one-shot workshops are unable to provide the ongoing sustained support needed for meaningful professional learning" (p.625). Unfortunately, many teachers report receiving less than eight hours of professional learning in a given school year (Wei, Darling-Hammond, & Adamson, 2010), which does not allow for time to develop deep discussion around content and instructional practices. Job-embedded, ongoing professional development allows teachers to engage in cycles of continuous learning, allowing teachers the opportunity to discuss problems of practice with follow up feedback and support (Darling-Hammond, 2010; Bates & Morgan 2018, Darling-Hammond, Hyler, Gardner, 2017).

In sum, the literature indicates that a well-designed, well-implemented PD model for teachers should be an essential component to developing and supporting 21st-century competencies for teacher professional learning at schools. This PD should involve content specific knowledge, active learning, collaboration, modeling, feedback and reflection that are

sustained. Although many of these characteristics come from the Learning Policy Institute report in 2017, these findings are confirmed by a number of studies both before and after 2017. All of these characteristics of successful PD are elements of professional learning circles, the subject of my study.

Teacher Learning and Relationship of Knowledge of Practice

A framework for considering three prominent conceptions of teacher learning as it relates to impacting and improving classroom instruction involves knowledge *for* practice, knowledge *in* practice, and knowledge *of* practice (Cochran-Smith & Lytle, 1999). In reviewing this framework, I focus on the importance of metacognition (or knowledge of practice), an important part of teacher learning communities and effective literacy PDs.

Knowledge *for* practice. The formal knowledge that teachers acquire to improve their practice, knowledge for practice is the how, when, and what teachers do in their daily work in the classroom. This could include the distinctive knowledge base (i.e., the so-called wisdom of practice), that is, "content or subject knowledge, pedagogy, educational theories, and conceptual frameworks, as well as classroom organization and effective instructional practice for teaching across the content areas" (Gardner, 1989, pp. ix–x). Teachers are thus regarded as knowledgeable professionals who adapt their teaching to the needs of their students (Reynolds, 1989). Teachers tend to learn this knowledge by attending preservice and professional development learning opportunities; however, to impact their students' learning, teachers must implement or co-construct their knowledge from the PD in their own classroom practices (Cochran-Smith & Lytle, 1999).

Knowledge *in* practice. The second conception of teacher learning is underpinned by the assumption that teachers possess a rich knowledge base of practice (i.e., knowledge for practice).

Knowledge in practice is rooted in a constructivist approach, in which teachers are viewed as knowledgeable professionals who use their past knowledge and skills to make instructional decisions. Some of the most essential knowledge for teaching is known as practical knowledge, which impacts instruction and is embedded in practice and in teachers' reflections on practice (Cochran-Smith & Lytle, 1999).

Knowledge *of* practice. Finally, the assumption underlying the third conception is that the knowledge teachers gain when their classrooms become places for professional investigation. This knowledge of practice stands in contrast to the other two concepts (Knowledge *for* Practice and Knowledge *in* Practice) because of an assumption that through a process of inquiry in a community, teachers use the knowledge gained from their practice to deeply reflect on and influence their instructional decisions (Lytle & Cochran-Smith, 1992); however, the acquisition of this type of knowledge does not happen in isolation. Instead, it tends to be co-constructed in a larger social context. "Teachers learn when they generate local knowledge of practice by working within the contexts of inquiry communities to theorize and construct their work and to connect it to larger social, cultural, and political issues" (Cochran-Smith & Lytle, 1999, p. 250). Knowledge making is not seen as separate from the knower; instead, it is seen as a "pedagogic act," constructed in the context of use, intimately connected to the knower and relevant to current situations (Cochran-Smith & Lytle, 1999, p. 273). The idea of teaching as an action that requires inquiry and artistry is related to Dewey's theory of learning by doing (Schön, 1987). This type of learning can take place over a teacher's professional career when classrooms are places of inquiry in school-based learning communities (Cochran-Smith & Lytle, 1999; Hord, 1997).

As a result of this research, a major shift has occurred since the 1990s to create teacher PD opportunities from the perspective of knowledge *of* practice. The shift revealed that teachers

learn best when teachers learn with and from other teachers to explore and question their own and others' interpretations, ideologies, and practices (Darling-Hammond et al., 2009; Fullan, 2007; Wei, Darling-Hammond, & Adamson, 2010; McLaughlin, 1993). This approach requires inquiry, which requires relationships for inquiry, knowledge, and professional practice in a learning community (Cochran-Smith & Lytle, 1999). "The teachers become researchers themselves" (Lytle & Cochran-Smith, 1992, p. 4). This concept is critical for teacher learning in TLCs because teacher inquiry requires teachers, beginning and experienced, to work together collaboratively to identify their problems of practice.

One concrete example of knowledge *of* practice used in the field is collaborative action research (AR), a vehicle for teacher inquiry and learning. Collaborative action research involves teachers becoming producers of knowledge (Burbank & Kauchak, 2003). This type of knowledge is much more relevant for teachers than the formal knowledge they develop at the university or the practical knowledge developed by individual teachers in their own classrooms, because knowledge *of* practice is data-driven, considers multiple options, and is generated for the purpose of improvement, which is likely to influence teacher thinking and practice (Cochran-Smith & Lytle, 1999).

Teacher action research. A major tenet of action research, which emerged as a popular tool for teacher PD in the 1990s (Bell & Aldridge, 2014), is that all professionals should be reflective practitioners; furthermore, teachers should produce their own personal theories of their work and hold themselves accountable (Schön, 1983, 1987). Action research (AR) is a form of inquiry participants can apply in educational settings to improve their practice and/or gain an understanding of their practice (Kemmis & McTaggart, 1988; Burbank & Kauchak, 2003). AR can also be beneficial for teachers as a form of professional development to improve their

practice (Carr & Kemmis, 1983). In fact, previous studies of AR as a tool for teacher PD have allowed teachers to take on the role of researcher in their own classrooms in order to gather relevant data to inform their practice as opposed to relying on evaluations from administrators who may not be as familiar with their students or subject area (Hubbard & Power, 1993).

Since AR came into use, however, much has changed in the field of education. AR comprises two aspects: action (what the teacher does) and research (how the teacher learns and explains what she or he does). AR (a) creates new knowledge for the teacher about his or her practice, (b) tests the validity of the new knowledge claims, and (c) generates a new theory in order to improve practice (McNiff & Whitehead, 2010). To conduct AR well, the experience must involve teachers moving from action to self-refection.

In the field of education, action research has been carried out by teachers to answer their own problems of practice, both individually and collectively. Based on an analysis of 73 published reports of AR studies conducted by classroom teachers, Kochendorfer (1997) identified seven types of classroom action research studies and the kinds of questions that they addressed:

1. Changes in classroom practice (e.g., What effect will daily writing have on my students?)
2. Effects of program restructuring (e.g., How will a Foxfire approach affect student work habits?)
3. New understandings of students (e.g., What happens when at-risk students perceive they can be successful?)
4. Understanding of self as teacher (e.g., What skills do I need to refine to be more effective in teaching students to work together?)

5. New professional relationships with colleagues and students (e.g., How can regular and special education teachers effectively co-teach?)
6. Teaching a new process to the students (e.g., How can I teach third graders to use reflection?)
7. Seeking a quantifiable answer (e.g., To what extent are portfolios an appropriate assessment tool for kindergartners?)

Since Kochendorfer's study, AR has been and continues to be a process of practical and grounded inquiry that empowers teachers to identify and solve their own problems.

What teachers know in theory and what they do with it in their practice influence student learning and achievement. Each of the knowledge concepts—of knowledge for practice, in practice, and of practice—places the teacher as the knower and agent in the classroom. However, collaborative action research takes these three concepts and highlights the relationships among inquiry, knowledge, and professional practice. This is why over the last 20 years, teacher action research has become one of the most important areas of focus in the field of education.

Learning Communities

Insights into how teachers learn best have spurred interest in learning communities to provide a space and structure to align around a shared goal in order to impact student achievement. There are many definitions of learning communities in the literature. However, there are two major points that seem to be consistent throughout that pertain to my study. The first is the focus on the human element of the community. According to Learning Forward's Standards for Professional Learning (2011):

> Learning within school communities requires continued improvement, promotes collective responsibility, and supports alignment of individual, school, and school system

> goals….Learning community members are accountable to one another to achieve the shared goals…working in authentic settings that support their improvement…with a collective responsibility for the learning of all students within the school system.

When professional learning occurs within a school driven by high expectations, shared goals, and collective responsibility, the outcome is a deep change for the individuals participating and the school that they serve.

The concept of learning communities came to education from the private sector in the 1980s (Hord, 1997). Research on the effect of work conditions on teacher quality and commitment to the profession has contributed to the discussion of the design of methods to assure that teachers feel supported in the workplace and committed to growing in their professional practice (Rosenholtz, 1989). When teachers feel supported by other colleagues and have opportunities for expanded professional roles, their self-efficacy is enhanced (Rosenholtz, 1989). The rationale for learning communities is anchored in two assumptions: (a) knowledge is created in the day-to-day lived experiences of the teacher, which are best understood when critically reflected upon with others who share similar experiences; and (b) the active engagement of teachers in learning communities at their schools fosters the sharing of their professional knowledge with one another, impacting student learning (Vescio, Ross, & Adams, 2008).

The concept of a learning community can be traced to Peter Senge's research on learning organizations. Senge (1990) described learning communities as groups of people who are continually expanding their capacity to create the results that they desire. In an educational setting, a learning community has been described as a place where teachers engage as "active learners in matters of special importance to them where everyone is encouraging everyone else's

learning" (Barth, 1990, p. 9). Another source of influence of learning communities in education has been Lave and Wenger's (1991) idea of community of practice (CoP), which is based again on the belief that the learning of individuals involves participation in the practices of social communities, and the construction of their identities as a result of their participation in such communities. Arising out of the private sector, learning communities have become an important part of the revolution in teacher education and have helped to spur reflection on individual classroom practice in supportive professional peer groups.

Professional Learning Communities

As school leaders devoted additional attention to building collaborative work cultures, learning communities came to be known as professional learning communities in schools (DuFour & Eaker, 1998). Since the 1990s Professional Learning Communities (PLC) have been implemented in schools as a method of improving teacher quality and student learning at the classroom level. The PLC has been described in the literature as a model where "teachers work together and engage in continual dialogue to examine their practice and student performance and to develop and implement more effective instructional practices" (Darling-Hammond & Richardson, 2009, p. 3). PLCs have been defined as places where educators are committed to working collaboratively in a continuous process of collective inquiry and action research to improve student results (DuFour & DuFour, 2010). A more explicit definition follows:

> Each word of the phrase "professional learning community" has been chosen purposefully. A "professional" is someone with expertise in a specialized field, an individual who has not only pursued advanced training to enter the field, but who is also expected to remain current in its evolving knowledge base. The knowledge base of education has expanded dramatically in the past quarter century, both in terms of research

> and in terms of the articulation of recommended standards for the profession. . . . "Learning" suggests ongoing action and perpetual curiosity. . . . The school that operates as a professional *learning* community recognizes that its members must engage in ongoing study and constant practice that characterize an organization committed to continuous improvement. . . . In a professional learning community, educators create an environment that fosters mutual cooperation, emotional support and personal growth as they work together to achieve what they cannot accomplish alone. (DuFour, DuFour, & Eaker, 2012, p. xi–xii)

The term has evolved over the years, and emphasis has been more recently placed on PLCs as "authentic" in their approach to teacher professional learning. Venables (2011) believes that when PLCs are authentic, "the teacher culture of a school shifts from one of the teachers working in isolation and competition to one in which teachers not only collaborate effectively but grow interdependent on each other, improving their individual and collective effect on learning" (p. 26).

Essential characteristics of PLCs. The term *professional learning community* has been used to designate many combinations of individuals coming together with an interest in improving education—from grade-level teams to school committees to district leaders. Because educators meet frequently for a variety of reasons, not all meeting groups qualify as PLCs. The six essential characteristics of a true PLC are as follows: (a) shared mission, vision, values and goals; (b) collective inquiry; (c) collaborative teams; (d) action orientation and experimentation; (e) continuous improvement; and (f) results orientation (DuFour & Eaker, 1998; DuFour, DuFour, & Eaker, 2012). These characteristics were essential to the current study because they

provided a framework for designing the Hawaii Lab Cohort (the TLC model used in this study) and were used to compare the TLC model examined below.

Shared mission, vision, values, and goals. What separates one learning community from another is its focus on common values and creating a shared understanding of the learning among all members of the group. Teachers and administrators sharing a vision do not merely agree with a good idea but also create a mental image of what is important to each individual and to the school (Hord, 1997). Learning communities are committed to guiding principles that illustrate clearly what educators believe and what they are trying to create at their schools (DuFour & Eaker, 1998). Furthermore, it is essential that the guiding principles (i.e., mission, vision, and values) of the group are agreed upon and articulated by all members of the group and shared with the school as a whole. DuFour and Eaker (1998) proposed that PLCs do this by developing and committing to a common vision/goal. It is this shared vision that helps to maintain the organizational learning of the group (Hughes & Kritsonis, 2006). There are many studies that demonstrate that a clearly articulated shared vision/goal is critical in forming a PLC (TLC). For example, Al-Taneiji (2009) conducted a study on PLCs in elementary and secondary schools in the United Arab Emirates using Hord's (1997) model. Al-Taneiji (2009) discovered that of all of the characteristic of a PLC, supportive structures and shared leadership (i.e., vision statement) were lacking. This was mainly due to the fact that the principal had developed the vision statement without the teachers' input and distributed it to the PLC teams. DuFour (2007) warned against this practice occurring at schools and stated the importance of visions statements being co-created by all members of the community.

Collective inquiry. Since the main focus of a PLC is on student learning, participants must adopt a mindset of collective inquiry and curiosity surrounding the teaching and learning

occurring in their classrooms at their schools. Educators in such a community are "relentless in questioning the status quo, seeking new methods, testing those methods, and then reflecting on the results" (DuFour & Eaker, 1998, p. 25). To support groups of educators in arriving at a collective agreement, members of PLCs engage in ongoing exploration and reflection of three critical questions: (a) What do we want each student to learn? (b) How will we know when each student has learned it? (c) How will we respond when a student experiences difficulty in learning? (DuFour, 2004).

Collaborative teams. A PLC is organized as a learning community in which members share a common purpose and goal for student achievement. One of the most important areas of emphasis in a collaborative team is the cultivation of professional dialogue. In order to build the capacity to learn, educators must be given opportunities to learn from one another, to share their knowledge and expertise, creating a momentum to fuel continued improvement and to enhance the skills of the whole, not merely an individual (Darling-Hammond, 2011; DuFour & Eaker, 1998). Garet, et al.'s (2001) three-year longitudinal study indicated that when learning communities are used as a vehicle for teacher learning it is often more effective when it includes a "collective participation of teachers from the same school, department, or grade" (p.102).

Action orientation and experimentation. PLCs are action-oriented; in other words, all participants look for ways to turn their visions (school level or classroom level) into reality. They recognize that learning occurs by doing or taking action (Wenger, 1998); therefore, participants are encouraged to approach teaching and learning as mini action research projects, in which they find value in developing and testing hypotheses (DuFour, 2004). Action orientation entails all members of the PLC developing and testing hypotheses, reflecting on what happened and why, developing a new theory to test, and evaluating the results (DuFour & Eaker, 1998). The focus is

not on the results but on the process of learning. Notably, the collective agreements the community has made help to support and inspire individuals to action. When participants shift their "common complaints to collective commitments" (DuFour et al., 2012), they move from a focus on them (outside of the group) to a focus on us (inside the group); from a focus on what others must do to improve the situation to a focus on what they can do to make the school or district a better place.

Continuous improvement. Continuous improvement in PLC requires that all members reflect and agree upon the fundamental purpose of the group and the criteria and strategies they will use to accomplish their improvement efforts (DuFour, 2004). One way to support continuous improvement is to have teachers engage in joint work—"thoughtful, explicit examination of practices and their consequences that come from collaborating on workplace tasks such as curriculum development, solving classroom problems of practice around student learning and peer observations" (Little, 1990, p. 520). This type of joint work is supportive in the creation of norms and protocols that clarify expectations regarding roles, responsibilities, and relations among team members (DuFour, 2004; DuFour & Eaker, 1998; Hord, 1997). The physical conditions (i.e., time to meet and talk, size of the group, communication structures) and the capacities of the individuals in the group (i.e., respect and trust levels, cognitive and skill base, supportive leadership, and roles) also impact the ability of a learning community to grow and improve and therefore must also be considered (Hord, 1997).

Results orientation. A true measure of an effective PLC is determined by its results, that is, its impact on student learning (DuFour, 2007; DuFour & Eaker, 1998). Thus, of utmost importance is that all members of the group participate in the ongoing process of "identifying the current level of the student achievement, establishing a goal to improve the current level,

working together to achieve that goal, and providing periodic evidence of progress" (DuFour, 2004, p. 10). These key characteristics of TLCs informed the current study of TLCs.

Teacher Learning Communities

TLCs function much like PLCs, sharing many of the same key characteristics—a shared vision, collaborative approaches to inquiry into a problem, a collective focus on examining student learning, reflective dialogue, all while taking time for an action-oriented approach to discovery in members' classrooms. Yet key distinctions differentiate a TLC from a PLC.

One major distinction between a TLC and a PLC is that the primary emphasis in a TLC is placed on teacher learning instead of student learning; however, TLCs are not merely places teacher professionals come together to share their best teaching tips. TLCs are places where teachers voluntarily come together to truly engage in professional work of educators (Darling-Hammond, 2011). The voluntary nature of TLCs is not always the case for PLC teams, often comprising teachers assigned by school leaders according to grade level or department. Due to the voluntary nature of TLCs, teachers who choose to become a part of a TLC tend to be more engaged (Darling-Hammond, 2011, p. 12)

Unlike many PLCs, TLCs are also communities with an "open-door" policy, by which group members are welcome to observe and learn from one another in the context of their own classrooms. By being physically present in their colleagues' classrooms, teachers in TLCs work collectively to extend their understanding of a particular instructional strategy or identified problem of practice (Darling-Hammond, 2011; Darling-Hammond & Richardson, 2009; Nelson, Slavit, Perkins, & Hathorn, 2008). PLCs also employ a collaborative approach to inquiry, which may include classroom observation of actual instruction. Although the focus of the TLC is

primary on the teacher's growth, the emphasis is still on student learning, with the focus of the inquiry being what impact is the teacher having on the students' learning (as evidenced by students' work and interactions).

The need for teacher learning communities. TLCs have been regarded as an effective vehicle for teacher professional learning for decades, because its key characteristics coincide with best practices. TLCs promote teachers' engagement in professional development that is "intensive, ongoing, and connected to practice; focuses on teaching and learning of a specific academic content; is connected to school initiatives; [and] builds strong working relationships among teachers" (Darling-Hammond et al., 2009). TLCs are more critical now than ever because in order to help students develop the complex and analytical thinking skills needed for the 21st-century, school leaders must provide professional learning opportunities for their teachers to adapt (Partnership for 21st Century Learning, 2009). If schools are to teach students 21st century skills,

> educators must collaboratively engage in the process to clarify what those skills are, the indicators they will use to monitor that each student has acquired them and . . . the best strategies they can use to help them develop those skills. (DuFour & DuFour, 2010, p. 79)

The landscape of demands and expectations for both teachers and students is constantly changing; TLCs have been identified as an effective approach for teacher professional learning in this changing landscape. Using TLCs to promote teacher learning yields numerous benefits.

TLCs link research to practice. Teachers often perceive a gap between what they learn in school or through traditional venues of PD and their everyday instructional practices. Many teachers have claimed that the research they learn is irrelevant to their practice; therefore, they

tend to fall back on familiar ways of teaching (Vanderlinde & Van Braak, 2010). Because participants in TLCs come together voluntarily to address problems of practice with which the group is concerned, they help teacher apply their learning directly to their instructional practice (Nelson et al., 2008). The very nature of a TLC anchored in a CoP creates a place for teachers to address problems of practice occurring in their classrooms.

TLCs, which provide a safe environment for teachers to reflect upon and explore their practice, are most successful when members give collective attention to analyzing a problem of practice, focusing on the group's inquiry about instruction and student learning (DuFour & Eaker, 1998). Teacher inquiry is fostered in the context of collegiality. "The beliefs, ideas, and intentions that are collectively held and pursued by the group is shaped by its discourse and collaboration" (Little, 1990, p. 3), implying that TLCs are built on a foundation of trust and appreciation of one another as professionals. When teachers explore problems of practice with their peers, they must reflect on the group's collective capacity to develop solutions to their instructional concerns (Horn & Little, 2010). This requires a high level of trust and risk-taking (Fullan, 2007).

Research has shown that many teachers have left the profession because they felt isolated in their classrooms, but participation in a TLC can increase teacher retention in the profession (Buchanan et al., 2013; Webb, Vulliamy, Sarja, Hämäläinen, & Poikonen, 2009). This improved retention can be attributed to the collective approach of TLCs, which gives teachers an opportunity to develop a shared vision with other teachers, cultivate authentic relationships, and create support systems (both emotional and pedagogical), all key to keeping morale high in teachers' practice (Darling-Hammond, 2011; Webb et al., 2009).

School-based TLCs leverage teacher professional learning. TLCs located in a school incorporate a sustained approach to reflecting on day-to-day instructional practices with the teachers in the group, serving to increase their knowledge base, professionalism, and ability to act on what they learn. School-based TLCs can be organized at grade levels, in departments, or across an entire school. In order for school-based TLCs to be effective, however, TLC members must consider the following functions: how they build and manage knowledge; how they create shared language, standards of practice, and student outcomes; and how they sustain aspects of school culture (McLaughlin & Talbert, 2006).

As noted above, TLCs can help teachers acquire types of knowledge to inform their practice. When teachers in a TLC examine student work and make connections with their practice, they create a knowledge of practice (Cochran-Smith & Lytle, 1999). When teachers in a TLC are engaged to rethink or reflect on their practice, they gain knowledge for practice; therefore, the TLC becomes "both the 'site and source' of learning as teachers become active learners through processes of inquiry and deliberation" (McLaughlin & Talbert, 2006, p. 6).

Oftentimes, TLCs also create new knowledge about curriculum and pedagogy (Goddard, Hoy, & Hoy, 2000). Collective efficacy in TLCs translates into the forums to share curricular knowledge, which thereby enhances instruction institution-wide (Darling-Hammond, 2011). This aspect of TLCs helps to minimize instructional fragmentation.

Finally, a school-based TLC must also create a shared language and standards for practice. In many schools, hearing a variety of terms for the same practice is common, but because of the collective capacity of the TLC, the teaching shifts from a private, sometimes isolated teaching practice to the public space of a learning community. "Shared vision, collaboration, and learning together provide the foundation for teachers to take collective

responsibility for students' success; the community's interdependent work structure allows teachers to act on this vision" (McLaughlin & Talbert, 2006, p. 7). This occurs because in a TLC, teachers share a collective responsibility to the outcomes of teacher and student learning.

The most impactful outcome shown in the literature was how school-based TLCs can help sustain school culture. A cohesive and vibrant TLC protects itself from the "fad of the month" by keeping its focus on agreed-upon learning norms and expectations of the group (McLaughlin & Talbert, 2006). Inquiry in a TLC not only enhances teachers' knowledge and skills but also increases the social resources of the school (Gamoran, 2003).

Even with all the benefits a school-based TLC brings, merely creating structures for teachers to collaborate will not guarantee effective learning communities (Dufour, 2004; Clarke, 2009; Boone, 2010). TLCs do not bring about change on their own (McLaughlin & Talbert, 2006). For TLCs to be effective, they should involve:

- Joint work on instruction, usually with a particular focus such as a subject area, particular group of students, or method of assessment
- Functional design and guidance
- Broad active support and teacher-initiated leadership. (McLaughlin & Talbert, 2006, p. 39)

The importance of classroom observations. TLCs provide opportunities for job-embedded learning and practice to occur in the school. The most authentic place for this is in a teacher's workplace (i.e., the classroom) (Easton, 2008), implying that coaching, mentoring, and observation must take place during the school day. Most teacher PDs, however, tend to occur after school in the afternoon, a morning here or there, or perhaps a workshop during a holiday break. This type of approach to teacher PD has separated learning opportunities from the natural

context, preventing the co-construction of learning in the classroom (Darling-Hammond, & Richardson, 2009). What it means to learn in an authentic and job-embedded environment is that "the whole social context of the classroom becomes the primary and legitimate site for professional learning that happens on an ongoing basis" (Bruce, Esmonde, Ross, Dookie, & Beatty, 2010, p. 2).

Challenges or drawbacks of TLC. Although TLCs have provided an ongoing venue for teacher learning (Darling-Hammond, 2011; Cochran-Smith & Lytle, 1999; McLaughlin & Talbert, 2006; Lieberman & Pointer Mace, 2008), it is not without its obstacles. The first obstacle schools need to address is providing time in school schedules for the collaboration structure to occur during the school day. Grossman et al. (2000) described how interweaving teacher learning and a learning community can be particularly challenging if they are not occurring in contexts where the teachers work (i.e., schools or classrooms).

A qualitative case study conducted at three secondary schools with three administrators and 12 teachers (Carpenter, 2015), found that allotting time for the TLC was key. In one school, the administrator placed a high value on providing a time and a structure for the teachers to meet, and influenced how the teachers' saw that time together, which they used to reflect on their practice. In contrast, the other two schools that did not have a set time or process in place for teachers to meet as PLC did not value the time together to reflect on their practice.

Meanwhile, teachers in TLCs who were not given the time to meet regressed into isolation. In a mixed-methods study on 12 teachers working in a "teacher inquiry team" at a K-6 elementary school, Bigger (2006) found that teachers who had not been given the time to meet reviewed their student data, which was the purpose of the TLC. These teachers, however, did not necessarily use it to drive instruction. Rather than engaging with their TLC, these teachers

worked in isolation. The study concluded that it is imperative that teachers have the opportunity for reviewing data collaboratively and in an ongoing basis to improve instructional practices.

Another study found that teachers afforded the time for TLCs gave their students similar opportunities for discussion in their own class, which in turn improved student learning. A case study conducted by The Community of Teacher Learners project (Grossman, Wineburg, & Woolworth, 2001) brought together 22 English and history high school teachers for 2.5 years to read books, discuss teaching and learning practices and design an interdisciplinary humanities curriculum. The researchers found that the TLC's emphasis on providing time for the teachers to engage in rich professional discourse had an effect on students being provided the same opportunities for discussion over time. These and other studies show that while giving teachers the time for TLCs is a challenge, it is an important part of effectively implementing TLCs.

If schools do not provide a time within their school schedules or school day, then the lack of time and attention given to the process can lead to a sense of "contrived collegiality" (Hargreaves & Fullan, 2012). This contrived collegiality can look like collaboration on the surface, but in reality, if members have not been afforded the time to dig into their learning, the relationships within the TLC do not have the space to thrive. Limited time also dampens relational trust (Wenger et al., 2002).

Another obstacle to consider is how the culture of the school can impact the strength of the TLC. Talbert and McLaughlin (1994) described the multiple contexts of teacher communities (e.g., school, district, departments, unions, etc.) and how they can either support or undermine teacher professionalism. In terms of teachers learning in communities, "the extent to which teachers subscribe to norms of collegiality and ongoing professional growth contributes powerfully to school culture and community for teachers" (p. 129). Recent literature on Teacher

Communities (TC), the newest term for teacher learning communities, have found that TCs are considered an effective tool for making true changes in teaching practices, starting from the teachers themselves (Vangrieken, Meredith, Packer, & Kyndt, 2017; D'Ardenne et al., 2013). This impacts the attitudes and motivation that teachers bring to their communities. TLCs work more smoothly when teachers volunteer and self-select into groups with other like-minded peers (Grossman et al., 2000). However, this is often not the case in many schools. In practice, teachers are often placed together and told what the focus of that group will be (Grossman et al., 2000; Talbert & McLaughlin, 1994) in hopes that the teachers' collegiality will pull them through. However, depending on the school culture and the teachers involved, this is often not enough to set the community up for success. Aligning a group's practice requires "mutual engagement" of its members (Wenger, 1998). This is critical to any learning community, but especially in a TLC anchored in a CoP where relationships are built on trust. Bates and Morgan (2018) explain that trust takes time to build: "Ensuring that relationships are steeped in trust will help teachers gain the most from the collaboration efforts" (p. 624). A longitudinal study of 400 Chicago elementary schools (conducted over a decade) showed that relational trust played a central role in creating effective learning communities (Bryk & Schneider, 2002). The findings from the study demonstrated that it is the day-to-day social exchanges that really matter within a school community. Bryk and Schneider (2002) stressed that social trust among teachers improves much of the routine work of schools and is a key resource for school reform, and without the hard work of collaboration among school staff this cannot be done effectively.

Studies have consistently found that a major challenge of implementing effective TLCs is giving teachers the time to meet. An additional challenge has to do with aligning school and community culture with the inquiry-based, collaborative nature of the TLC.

Professional Development Models of Literacy Instruction

Because my study specifically focused on PD for literacy instruction, the following section explores the literature related to teacher learning in literacy, particularly as it relates to teacher learning communities. Since the 1990s, numerous models for teacher PD in literacy instruction similar to TLCs have proliferated. These include: collaborative inquiry teams (Nelson, 2012), Literacy Learning Cohorts (LLC) (Brownell et al., 2017), lesson study (Fernandez, 2002; Hiebert & Morris, 2012; Lewis, Perry, Friedkin, & Roth, 2012), and literacy coaching models (International Reading Association [IRA], 2004; Lyons & Pinnell, 2001). This section offers a broad overview of these types of literacy teacher education. I will then discuss how each is related to HLCs, the focus of this study.

Lesson study

Lesson study, a popular form of PD for literacy instructors, derives from a well-established Japanese approach to examining one's practice that can be traced back to the 1900s (Fernandez, 2002). Lesson study brings groups of teachers together to discuss a lesson that they have already jointly planned and then observe one another as they implement the lesson in their individual classrooms. This approach to teacher PD has been promoted by many researchers in the United States (Fernandez, 2002; Hiebert & Morris, 2012; Lewis, 1998; Lewis et al., 2012) and implemented in U.S. schools as a way to engage teachers in examining their practice. Lesson study includes teachers selecting a goal upon which to base their lesson, working on the planning of the lesson with the group, implementing the lesson with feedback from members of the group, and sometimes writing a lesson study report to take stock of the quality of their lessons and activities to redirect them accordingly (Fernandez, 2002). Like TLCs, the lesson study process

emphasizes teacher collaboration and the co-construction of content knowledge and pedagogy through the development of a model lesson (Lewis, Perry & Friedkin, 2009).

Lesson study is often employed as an approach to PD in order to offer a job-embedded approach that meets the needs of teachers with limited time. Lemon (2016) conducted an action research study with a grounded theory approach that utilized lesson study as an intervention to determine the impact on middle school teachers' literacy lesson design. This study took place with four middle school teachers over a twelve-week period. According to Lemon's (2016) analysis of the data, the teachers' lesson plan design varied from teacher to teacher (individually), but during the collaborative lesson study design process, the teacher participants demonstrated an increased level of detail in their lesson plans and an increased use of their literacy standards and literacy strategies in their lesson plan design (p. 117).

This lesson study approach was incorporated into the HLC model during the second semester of the study. Teachers had the opportunity to co-plan a lesson and observe one another teach the lesson around their cohort's instructional focus. Afterwards, the teachers reflected on the outcome of the lessons for teacher and student learning.

Literacy coaching

Another important model of literacy PD, literacy coaching became popular in education in 2004 when the reauthorization of the Individuals with Disabilities Education Improvement (IDEA) inspired the response to intervention (RtI) initiative as an alternative method for identifying and supporting students who struggle in literacy development (Puig & Froelich, 2007). Many definitions of a literacy coach appear in the literature. For example, a literacy coach can be a person who learns and supports teachers as they grow in their careers (Puig & Froelich, 2007). Another definition states that the literacy coach uses observation and co-learning to help a

teacher see beyond what is happening in the classroom and improve it by expanding her or his knowledge bases and to offer support and encouragement when needed (Lyons & Pinnell, 2001). Literacy coaches also clarify and define for themselves and others the nature of their work:

> A literacy coach is one who helps teachers to recognize what they know and can do, assists teachers as they strengthen their ability to make more effective use of what they know and do, and supports teachers as they learn more and do more. (Toll, 2014, p. 4)

To provide guidelines for the development of literacy coaches in schools, the International Reading Association, now the International Literacy Association (ILA), along with the NCTE created standards for middle and high school literacy coaches (Buchanan et al., 2005). These standards were updated in 2010 and published by the ILA; they are called the Reading Specialist–Literacy Coaches Standards, designed to facilitate the alignment of educational and professional development with expectations of the CCSS.

Research has shown literacy coaching to be effective in supporting teachers' learning because it enhances student learning and is aligned with how adults learn (Toll, 2014). In a four-year longitudinal study of the effects of literacy collaborative models, literacy learning of the students increased and persisted (Biancarosa, Bryk, & Dexter, 2010) perhaps because literacy coaching promotes collaboration among teachers, which in turn can promote reflection that can transfer to decision making on their instructional practice (Schön, 1987). Literacy coaching shares many of the same attributes as TLCs, which involve collaboration and reflection on ongoing instructional practices.

Literacy Learning and Teacher Learning Communities (TLCs)

Finally, a number of literacy education initiatives have emerged that are closely related to TLCs. Collaborative inquiry teams and Literacy learning cohorts (LLCs), both types of TLC,

have been identified as effective means to transform literacy learning in schools (Nelson, 2012, p. 1). Collaborative inquiry incorporates teachers learning together in a PLC by anchoring their practice in information about student learning.

Literacy learning cohorts (LLCs), professional peer learning groups with many of the same elements as TLCs, also provide teachers opportunities for the refinement of instruction through shared practice. Designed to improve teachers' content and pedagogical knowledge for reading instruction for elementary students with learning disabilities (Brownell et al., 2017), LLCs incorporate Desimone's (2009) framework for professional development which include five elements: specific content focus, active learning, collective participation, sufficient duration, and coherence (Desimone, 2009). Like TLCs, the LLC model includes additional opportunities for intensive, individualized support to improve teachers' knowledge and pedagogy for teaching reading. Brownell, et al. (2017) found that LLC teacher cohorts had students with increased fluency and word study knowledge. Hierarchical linear modeling analyses showed that students of LLC teachers made significantly greater gains on word attack strategies and decoding skills than the students of teachers in the comparison group. However, the LLC model did not see the same effect on students' fluency outcomes. The researchers suspect that this could have been because the students in the LLC group were placing their main focus on decoding skills.

These examples of LLCs show that the TLC model has been found to be efficacious for literacy instructors. Specific content focus, active learning, collective participation, sufficient duration, and coherence, the key characteristics of TLCs, also made an impact on practice and student success in literacy instruction.

Summary

To close the literature relevant to the research topic, including the definition and elaboration of (a) effective characteristics of teacher professional development, (b) teacher learning and metacognition (or "knowledge of practice") in teacher education, (c) teacher learning communities in education, and (d) models to consider for effective literacy PD.

Effective teacher education is content-focused. It involves active learning, collaboration, feedback and reflection, and explicit modeling of instruction for a sustained duration. Successful TLCs, we have seen, involve many of these same attributes. Effective TLCs are successful in transforming teaching practices when they take place in a supportive environment among colleagues with similar goals in the same content area observing one another's real-time instruction. TLCs require a shared mission, collective inquiry, collaborative ideas, and an action orientation that is continuous and results-oriented. TLCs succeed when participation is voluntary, and teachers practice an open-door policy in observing colleagues' instruction. In addition to improving student learning, TLCs have been shown to help teacher retention and promote shared institutional knowledge, which can reduce fragmentation of curriculum and teachers' sense of isolation. TLCs, however, require time for teachers to meet and they require the school and community cultures to nurture these professional groups. These characteristics are all important attributes of the successful teacher learning community (TLC), which has also been found to be effective in literacy PDs, and which is the model of focus in this study.

In Chapter 3 I will introduce the model that was informed by all of the literature review.

CHAPTER 3. HAWAII LAB COHORT FRAMEWORK & CURRICULUM

Hawaii Lab Cohort Overview

Hawaii Lab Cohorts (HLC) are Teacher Learning Communities (TLC), anchored in a Community of Practice (CoP), that are designed to offer an ongoing, job-embedded, differentiated approach to teacher professional learning. The Hawaii Lab Cohort model strengthens and extends teachers' professional practice by providing them multiple opportunities throughout the year for rich classroom observations, coaching and mentoring, and for the giving and receiving of feedback and resources from their colleagues and from a content area specialist.

As stated in Chapter 1, the HLC grew out of the desire to build the capacity of and deepen educators' understanding around the Common Core Standards (2010) and the associated pedagogical shifts to instruction. This desire was initially inspired by Maryland University professor Cynthia Merrill and her teachers who were using their classrooms as "learning laboratories," which included focused discussions of observations of colleagues' classrooms (Brancard & Quinnwilliams, 2012). I chose to include the term "lab" in the title of the model because it emphasizes professional learning that is situated in teachers' classrooms and fosters collaborative communities. The participants of the HLC were asked to take risks in the application of their learning, to give and receive actionable feedback, and to commit and be accountable to the learning process of the whole community as well as their own individual learning. By opening up their classrooms as "learning labs," teachers are better able to hone their practice by drawing on the expertise of multiple educators in a collaborative setting (University of Washington INSPIRE, 2019).

What makes the HLC model unique in comparison to other models I reviewed is the HLC takes into account equal priority to establishing a safe, trusting, and supportive environments as it does to the content learning. I say this because the model is wrapped in a community of practice theory. More importantly, the framework of the HLC incorporated all of the design elements for 21st century teacher PD and professional learning and collaboration (Darling-Hammond, Hyler, & Gardner, 2017).

I dedicate Chapter 3 to the HLC (overview and curriculum), because I will show how I bridged theory and research to create a fresh PD model, or a model that was more in alignment with what research had suggested as effective for 21st century teaching and learning in Hawaii. The HLC launched in 2013 in the Kailua-Kalaheo Complex Area of the Hawaii Department of Education (HIDOE) and, as of 2019, is still in practice. Since the launch, the model has been implemented in multiple complex areas within the HIDOE and San Francisco. The overall mission of the HLC was to bring every aspect of what has already been reported in the literature and to create a PD experience that was comprehensive and aligned with the design elements for effective teacher learning. This comprehensive model is fully informed by many of the foundational studies driving the field (Rosenholtz, 1989; Costa & Kallick, 1993; Little, 1993; Hord, 1997; Dufour & Eaker, 1998; Cochran-Smith & Lytle, 2001; Snow-Garet et al., 2001; Joyce & Showers, 2002; Renner & Lauer, 2005; Dufour, 2004; McLaughlin & Talbert, 2006; Stoll et al., 2006; Yoon et al., 2007; Hattie, 2008; Desimone, 2009; Wei, Darling-Hammond, & Adamson, 2010; Darling-Hammond & Richardson, 2009; Darling-Hammond, 2011; Darling-Hammond, Hyler, Gardner, 2017; Venables, 2011; Cunningham, 2011; Gallagher al et., 2011; Wiggins, 2012).

The model is also grounded in the theories underpinning Teacher Learning Communities and Communities of Practice and provides a structured, systematic approach to ongoing, job-embedded, differentiated teacher professional learning.

The Hawaii Lab Cohorts model emphasizes collaborative learning with an individual focus within each Teacher Learning Community. The cohorts were made up of 6-8 teachers, purposely capped at this number of participants since, as informed by the literature, smaller is best for active participation (Vella, 2002). The TLC was led by a content specialist (i.e., in this case a literacy specialist) who guided the teachers on their learning journey and ensured that they achieved their stated learning goals. Once formed, the TLC co-constructed a main umbrella focus and selected a particular content area of interest (e.g., an instructional reading strategy) to explore for the full academic year in monthly meetings. In addition to the group focus, each teacher set individual goals for that academic year. The TLC participated in quarterly learning cycles where they engaged in action research that focused on achieving their individual goals. This included applying the goals to their classroom practice, reflecting on the impact of those goals on their students' learning, and adjusting/extending their practice accordingly to meet their desired outcomes.

Hawaii Lab Cohorts Model Theoretical Underpinnings

The focus of this study was on the model of the Hawaii Lab Cohorts as implemented in the Kailua-Kalaheo Complex Area, 2017-2018. Next I describe the HLC methods underpinning the model and provide context for the research and background for the research questions that follow.

Research has shown that in order to make a Teacher Learning Community more authentic to its members, it must incorporate rich opportunities for groups of teachers to "work collaboratively to reflect on their practice, examine evidence about the relationship between practice and student outcomes, and make changes that improve teaching and learning for the particular students in their classes" (McLaughlin & Talbert, 2006, p. 4). When I developed the HLC model, I used these key elements and the theoretical tenets of situated learning (Lave & Wenger, 1991) and communities of practice (Lave, 1991) as a guide. In addition to these theories the framework of the HLC is grounded in the seven design elements elucidated in the *Learning Policy for Effective Teacher Professional Learning in the 21st century* (Darling-Hammond et al., 2017). These seven design elements came to serve as the framework for the HLC and served to build a bridge from theory to practice in a systematic way. Grima-Farrell's (2016) research-to-practice model was also a major inspiration for the HLC model because its 16 research factors support teachers in their instructional decision-making process through implementing validated educational approaches in a sustained way.

Seven Design Elements of the Framework

Chapter 2 detailed Darling-Hammond, Hyler, and Gardner's (2017) meta-analysis on the wide body of PD literature that yielded seven design elements contributing to effective PD for the 21st century teacher. These seven design elements informed the initial core framework of the HLC Professional Learning Model, as shown in the seven-wheel spokes of Figure 1 below. They include: (1) content-focused PD; (2) active participant learning; (3) built-in/scheduled collaboration and observation time; (4) linking research and literature to models of effective practice; (5) responsive, sustained duration; (6) coaching and expert support; and (7) ongoing

and actionable feedback and reflection. While there is overlap amongst the seven practices, it is important to consider each practice on its own to gain a deeper understanding of the interrelated aspects.

Figure 1. Hawaii Lab Cohort Professional Learning Model

In the following section my intent is to describe the elements and show how they were integrated in to the HLC model.

Content-Focused PD

The HLC model combines an umbrella focus (i.e., main focus) and raindrop approach (i.e., individual focus) allowing for both a shared and individual focus on content, which is often

lacking in one-and-done PD experiences. According to Darling-Hammond, Hyler and Gardner (2017), teachers' professional learning should be focused on the content that they teach. Therefore, the content-focused PD is discipline-specific. HLC teachers voluntarily come together to learn in a collective setting as a Teacher Learning Community, but still have the opportunity to co-create a goal for their individual learning that is authentic and meaningful to their current practice.

When the cohort was formed for this study, the interested teachers were allotted time to co-construct the main focus/goal (i.e., instructional strategy) for their cohort's learning during the informational meeting prior to it starting. After a bit of negotiation and input from me, the facilitator, the teachers selected the umbrella focus of their cohort to be around small group reading instruction. The cohort focused on the specific discipline of English language arts, and defined for themselves their collective goal as: "*using formative literacy assessments to target instruction particularly in the areas of phonological awareness, phonics, and fluency in order to provide strategy lessons to meet students' needs and strengths in their reading development process."* This goal became the purpose for learning with and from one another in the cohort. Each meeting included time for teachers to learn about their instructional strategy, apply it to their classroom instruction, and reflect on that practice (Bates & Morgan, 2018).

Active Learning

The HLC model is grounded in an active learning approach (Hannafin & Hannafin, 2010; Trotter, 2006; Desimone, 2009; Darling-Hammond, Hyler, Gardner, 2017; Snow-Renner & Lauer, 2005; Garet et al., 2001). For an effective TLC model, teachers need to participate in a series of learning activities over extended periods of time in a trusting community in order to deepen their understanding to the point of transfer to practice (Darling-Hammond, 2010).

For the purpose of this study, active learning activities mean that the teachers collaborated and engaged in professional discussion with one another, continually applied the instructional strategy in their classrooms and participated in monthly evaluations and self-reflection of their progress and its impact on their students' learning. Over the course of one school year, teachers spent over 45 hours in various active learning activities. This aligns with Yoon's study findings that concluded that substantial Teacher PD opportunities that offered 50 hours over a 6 to 12-month period can boost student achievement by 21 percentile points (Yoon et al., 2007). These active learning opportunities were embedded in the model in numerous settings and included: teacher goal setting, one-to-one coaching, peer reflection and feedback, observational visits, self-reflection, book talks, and artifact sharing.

Teacher quarterly goal setting. Teachers set quarterly goals aligned to their cohort's instructional or umbrella focus (Mills, 2000). Teachers were also encouraged to focus their individual quarterly goals to an area of growth and/or interest within the umbrella focus (McNiff & Whitehead, 2010). Teachers were then given feedback on their goals from the facilitator and their peers to reflect on and incorporate into the implementation of their goal for that quarter (Joyce & Showers, 2002).

Artifact sharing. Artifact sharing was included at monthly interim meetings. Throughout the year, teachers created and shared many types of artifacts (i.e., records of teaching and learning) (see Appendix I) that aligned with their individual teacher goals. This enabled them to examine, reflect on and learn from one another's teaching practices in order to gain ideas about improving their own practice (Borko, 2004).

Book study. Teachers participated in a yearlong book study to build shared language and schema around their cohort's instructional focus (Nelsen & Cudeiro, 2009). The teachers were

given two anchor texts at the beginning of the year: *Teaching Reading in Small Groups* (Serravallo, 2010) and *The Reading Strategies Book* (Serravallo, 2015). These two texts complimented each other by othering both theory and ideas for practice in the classroom. The former included an overview of the formative assessments and strategy lessons planning they would use to facilitate effective small groups in instruction in their classrooms. The latter provided 300 different reading strategies teachers could use with their students. These texts were used as a starting point for their professional discussions, feedback and reflections, as well as a guide and reference outside of the cohort meeting times.

Support for Collaboration

Webb et al. (2009) argued that collaboration and collective responsibility is central to having an effective learning community. In order to facilitate an environment that effectively supported a collective mindset, the HLC model was anchored in Community of Practice theory (Lave & Wenger, 1991). This helped to foster relationships that lead to one of the key elements of using a Community of Practice approach in the field of education: establishing trusting relationships and creating teacher teams that collaborate to work together to learn from one another and solve problems of practice (Costa & Kallick, 1993). Costa and Kallick's (1993) research indicates that building relationships with "critical friends" takes time: time to talk, to learn from one another, to try out new practices and collect data, to reflect on the data individually, and, as a cohort, to truly understand their impact on student learning. One way this type of collaboration is supported in the HLC is through professional dialogue.

Teachers participated in the reading and discussion of a chosen anchor text that is reflective and aligned to the members' instructional focus. In the ongoing reading of anchor texts throughout the year, members of the cohort built a common language around content knowledge

and strategies to implement their instructional practice. These opportunities for collaborative inquiry enhanced the professional learning among all members of the cohort over time because they discussed their thoughts and ideas openly with one another in order to improve their classroom practice. They also had a safe space to reflect on the practical application of these ideas and refine them as needed to enhance student learning.

Models of Effective Practice

Observations of lab teachers' classrooms were critical to the teachers' learning and were integrated into the HLC. Models of instruction provide teachers with a clear vision of what best practice looks like (Hord, 1997; Darling-Hammond, Hyler, Gardner, 2017). The HLC teachers would hold a pre-observation meeting at which the observed teacher provided clarification on what will occur during the lesson and on what areas they wanted specific feedback. The observations then took place in the observed teacher's classroom. Following the classroom observation, the teachers all met for a debriefing session to discuss what went well in the lesson, ask clarifying questions, and provide the teacher with actionable feedback regarding their instructional focus. This entire process was critical to teacher learning because teachers modeling and demonstrating to one another showed the value of the expertise that they brought to their classrooms and became a model from which other practitioners could learn (Bates & Morgan, 2018; Sweeney, 2003). It also provided HLC teachers a vision of the learning that they collectively tried to achieve.

Coaching and Expert Support

The facilitator supported cohort collaboration and was a key component to the success of the lab. The role of the facilitator is to plan and organize the learning opportunities (i.e., observational visits, interim meetings), provide expert support on the content learning, and

manage discussions and culture within the cohort (Venables, 2011). Facilitators must be equipped with skills in working with adult learners, bring deep content knowledge and experience with the instructional strategy that is the focus of the cohort, and have the ability to facilitate discussion among members reflecting on their practices (Houk, 2010). Coaching and expert support is critical to creating rich learning opportunities for teachers. The facilitator must have the ability to provide individualized feedback as well as model and demonstrate the strategy or skill the cohort is trying to implement (Bates & Morgan, 2018). In addition, the facilitator must ground all conversations about practice in student data, help to analyze that data with the teacher, and provide suggestions on next steps that support their instructional decisions (Darling-Hammond, Hyler, & Gardner, 2017).

Feedback and Reflection

Feedback and reflection are two components critical to teacher learning demonstrated throughout the HLC (Schön, 1987, Wiggins, 2012). Because the HLC was a yearlong professional learning experience, teachers had multiple opportunities to receive feedback from the facilitator and from their peers to support one another in growing their practice. Teachers mainly shared feedback on how the teacher could strengthen their implementation of the instructional strategy based on what they saw in the observations. Teachers also had built-in opportunities at the beginning, middle, and end of the year to reflect on their goals, the feedback they received, and the impact it had on their teaching and students' learning (Phillips, 2003).

Sustained Duration

Finally, the year-long model offered opportunities for the teachers to continue their participation for multiple years as long as the cohort's umbrella focus remained the same. This was intentionally designed because years of research have shown that the one-and-done, sit-and-

get approach to teacher learning usually fails to transfer to daily practice, no matter how dynamic it may be (Darling-Hammond, 2010). In fact, research has shown that U.S. teachers who experience PD in terms of hours—often fewer than eight over the course of the year (Wei et al., 2010)—do not gain what is known to be critical for teacher professional learning for the 21st century.

HLC Professional Learning Quarterly Cycle

In addition to the seven elements of the framework, the teachers worked through a professional learning cycle that allowed them to apply their learning and achieve mastery and deeper understanding of their instructional goals four times a year. The quarterly learning cycle was another practical method (Bates & Morgan, 2018; Grima-Farrell, 2016; Sweeney, 2003) in the HLC framework (see Figure 2 in which teachers conducted mini-action research (AR) in their classrooms once per quarter). This allowed them to create and implement four different action research goals. Research has demonstrated that teacher AR enables participants to investigate and evaluate their work in order to help them as professionals create their own theories of practice with regard to the teaching and learning occurring in their classrooms (Grima-Farrell, 2016; McNiff & Whitehead, 2010). The HLC learning cycle supported teachers in systematically moving through this process collectively as a cohort.

The learning cycle incorporated the following four parts: plan, apply, reflect, and extend (Bell & Aldridge, 2014; McNiff, 2013; McNiff & Whitehead, 2010, 2011; Pinnell & Fountas, 2009; Sweeney, 2003). The plan-apply-reflect-extend learning cycle occurred to allow teachers to create and implement quarterly AR goals. AR enables teachers to investigate and evaluate

their work to help them create their own theories of practice around teaching and learning in their classrooms (Grima-Farrell, 2016; McNiff & Whitehead, 2010).

Figure 2. Hawaii Lab Cohort Learning Cycle.

Plan

In this phase, teachers began the cycle by creating (a) quarterly teacher goals (see Appendix H) based on their overall vision for student success and (b) specific research questions designed to address a problem or grow their knowledge of a particular instructional practice in their classroom (McNiff, 2013; McNiff & Whitehead, 2010). For many teachers, using an AR approach was not always intuitive; therefore, the facilitator and peers provided the teacher coaching and feedback on her or his goals in order to support successful implementation.

Apply

In this phase, teachers applied their goals in their classrooms and collected evidence (artifact data) from their chosen case study group. Teachers brought their artifacts to share at the monthly interim meetings with a caption sheet designed to explain the following to their peers: (a) what the artifact was, (b) why they chose this particular artifact, and (c) its impact on student learning (see Appendix I).

Observational visits in a lab model were a prominent feature in this phase because they allowed teachers the opportunity for reflection and self-assessment of their goals (Sweeney, 2003). The observed teachers provided the cohort with their focus; that is, the goal they worked on for the quarter for feedback. Observing teachers spent an entire class lesson (i.e., 45 minutes to one hour) gathering evidence and then following up with a debriefing session with the teacher. The second part of the day was devoted to follow-up targeted PD aligned with the cohort's umbrella focus and goals for the quarter.

Reflect

Through professional dialogue discussions at the interim meetings and observational visits, teachers reflected on what worked to support their goals and what areas they needed to adjust. They also reflected on student work and levels of learning. This part of the cycle helped to ensure that teacher learning was "linked to the learning of children" (Pinnell & Fountas, 2009, p).

Extend

Finally, teachers continuously extended their content knowledge and pedagogy of the instructional practice by reading and having professional dialogue around their anchor text and reflecting on how to apply this new learning to their practice (Nelsen & Cudeiro, 2009).

Research Question Development

After four years of implementing this comprehensive HLC model, it became important to systematically study teachers' perceptions of the model, their participation in the HLC, and the model's impact on the teachers' learning and their students' literacy learning. In addition, it was important to examine how their participation impacted their own professional literacy learning and ability to apply their learning to their instructional practice. To explore these perceptions and the impact of the model, the following umbrella question was asked: What happens when five teachers participate in an HLC for one academic year to learn about literacy instructional methods? The following sub-questions were also asked:

1. How do teachers describe their experiences from their overall participation in the TLC?
2. How does participation in a TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?
3. What are teachers' perceptions of students' literacy growth?
4. How do I align my beliefs with my practices with teaching and learning?

CHAPTER 4. METHODOLOGY

The purpose of this study is to examine how the use of a TLC model, HLC, as an ongoing, differentiated, job-embedded approach to teacher learning could meet the challenges that schools in Hawaii currently face with providing high quality, ongoing teacher PD for their teachers in order to meet the expectations of new educational policy requirements. This study also examined how the HLC's model for professional learning impacted teachers' content knowledge and pedagogy in the area of literacy, its impact on their instructional behaviors (decisions), and their perceptions of how their participation influenced their students' literacy learning in their classrooms in the area of reading.

Research Design

This study utilized a qualitative research methodology, in the form of a qualitative action research case study, to explore the lived experiences of my teacher participants. I chose to draw upon these two methods, because I wanted to study the teachers' experiences of my model (TLC), the perceptions of their learning and their students' learning; as well as reflect on how my own beliefs around teaching and learning have been infused into the model during my study for one academic year. Since action research and case study are both qualitative methods, I believe that they complement one another and provide me the tools that I will need to meet the objectives of my study.

Creswell (2013) described qualitative research as "a means for exploring and understanding individuals or groups ascribed to a social or human problem" (p. 4). In other words, qualitative researchers focus their attention on a single phenomenon that is central to their inquiry (Clark & Creswell, 2010). When designing my own study, I drew upon Creswell's (2013) set of assumptions that one should consider when conducting a qualitative research study.

Creswell's approach (2013) provided the following set of conditions that guided my study: (1) the research should occur in natural settings, where human behavior and events occur; (2) the researcher is the primary instrument in the data-collection; (3) the data that emerges from the study must be descriptive with the primary focus being on the participants' perceptions and experiences, to understand not one, but multiple realities. Throughout this chapter I will further elaborate on how I specifically addressed these assumptions in my study.

Case study research design. Case study research methods were chosen for my study because I wanted to do an in-depth exploration of how teacher participation in the HLC shaped their professional literacy learning experiences, instructional practices, and perceptions of their students' literacy learning. Clark and Creswell (2010) defined case study research design as a set of qualitative procedures to explore a bounded system of interest (i.e., program, event, or activity) involving individuals (p. 242). However, Creswell (2013) provided a more elaborative definition of case study research defined:

> A qualitative approach in which the investigator explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audio visual material, and documents and reports), and reports a case description and case-based themes. (p. 97)

A case study research design was appropriate to use for my study since according to Merriam and Tisdell (2015), it provides "an-depth description and analysis of a bounded system in its real-life context" (p. 37). This approach focuses on collecting in-depth information using multiple sources of evidence to understand the complexities embedded with a particular phenomenon (Yin, 2009). In my case, the phenomenon was bounded by a school-level cohort of

five teachers from Aloha Elementary school during the 2017-2018 academic year. The depth of data collection involved multiple sources of data (e.g., observations, interviews, artifact documents, and field notes), to understand case-based themes around the model's impact on the teachers' literacy learning and their perceptions of its impact on their students' learning and to improve the model for future professional development purposes. Since case studies also allow for the opportunity to take a snapshot of a real-life event or situation, I believed that this approach was well suited for an educational context.

Case study scholars, including Clark and Creswell, 2010, Herr and Anderson, 2005, and Yin, 2009, argued that qualitative research questions should reflect the researcher's interests and concerns on multiple levels. As the District Educational Specialist (DES) of Literacy in the HIDOE, my research questions presented in Chapter 1 reflected my interests and concerns to better understand teachers' experience of the HLC model in order to improve it for future use. Gubrium and Holstein (1997) have also noted that qualitative researchers tend to ask "what" and "how" questions. They explained:

> The commanding focus of much qualitative research is on questions such as *what* is happening, *what* are people doing, and *what* does it mean to them? The questions address the content of meaning, as articulated through social interaction and as meditated by culture. The resulting research mandate is to describe reality in terms of what is naturally. (p. 14)

When I constructed my research questions, I was mindful of these specifications and therefore my central research question as well as sub questions all reflect these recommendations.

Action research design. Clark & Creswell (2010) defines action research design as one that "addresses a specific, practical issue and seeks to obtain solutions to problems" (p. 333). They go on to state that action research designs are systematic procedures done in the spirit of inquiry by practitioners (e.g., teachers) to gather quantitative and qualitative data to improve the ways their particular professional setting operates (e.g., school).

Conducting action research involves a non-linear process. Unlike other research designs, action research involves the researcher in cycles or spirals between reflecting on the problem, collecting data, and then taking action (Kemmis & McTaggart, 1988; Clark & Creswell, 2010; Herr & Anderson, 2005). According to Herr and Anderson (2005), in the field of education, this approach can lead educators in reflecting and extending their knowledge to improve their current practices. Participating in a spiral of events (i.e., HLC's learning cycle that occurred 4x a throughout the year) provides opportunities for the educator to plan for a change in action to take place, implement that plan, reflect on the outcome, and make adjustments and prepare to future action. This cyclical approach to inquiry by the individual often leads to professional and or organizational transformation (Herr & Anderson, 2005). The use of action research was ideal for my study, because I wanted to do an in-depth exploration of the teachers' experiences of their participation in the model for one academic year to truly understand what particular component/s had the most or least impact on their instructional literacy practices in order to make adjustments for future participants. It is because of this focus on the individual practitioner attempting to understand their craft better that action research is sometimes associated with *self-study* (Herr & Anderson, 2005). According to Samaras and Freese (2006), self-study (e.g., journaling) can help to create a "systematic and critical examination of actions and context as a path to develop a more consciously driven mode of professional activity" (p. 11).

Critical friends and reflection. The concept of critical friends and reflection is common in self-study methodology, yet it also applies to action researchers, so I borrow these notions from the self-study literature to guide aspects of my action research. Stolle, Frambaugh-Kritzer, Freese and Persson (2019) who synthesized numerous definitions in the literature identified two particular trends surrounding the term "critical friendship" (p. 2). The first area is the critical friend supporting and coaching the transformation of another's practice. The second, is supporting the trustworthiness of their research methods. Both of these areas supported my fourth research question, *How do I align my beliefs with my practice with teaching and learning?* According to Feldman, Altrichter, Posh, and Somekh (2018), a critical friend should be involved in all stages of the research which can help the researcher to focus, clarify, and gain ideas around their findings and their next steps. However, since the main aim of action research is to improve one's professional practice, this partnership requires reflection to occur both in individual self-study and interactive inquiry in order to provide a systematic way of participating in deep thinking about one's practice (Stolle, Frambaugh-Kritzer, Freese & Persson, 2019).

As the designer and main facilitator of the HLC model, I wanted to use this approach as a way to also examine how my beliefs around teaching and learning that have been constructed into the framework truly play out during one academic year with a school-based cohort. I believed that by incorporating critical friends and reflection into my research design, I will have provided opportunity for my own self-reflection and learning to occur in order to advance my own professional practice and pedagogy.

Context of the Study

Research Setting. All the HLC meetings and observations took place at Aloha Elementary School, a public school within HIDOE Windward District schools. Aloha Elementary is the largest school on the Windward side of the island of Oahu with an enrollment of over 800 students in Pre-Kindergarten through Grade 6, and a teaching staff of over 80 educators. The school is located on a military base, which serves both military personnel and their families. The school's principal at the time of the study placed a strong emphasis on having a shared leadership approach at his school and looked to provide many opportunities for his teachers to collaborate and learn from one another. This meant the principal was open to having a lab cohort at his school since it aligned with his shared leadership vision. My study took place from August 2017 to May 2018.

Participants and Sample Selection. In selecting participants for the study, I wanted to conduct my study with teachers within the school district I that worked in from Aloha Elementary School during the 2017-2018 academic year. I chose a purposeful and convenience sampling strategy (Mertler & Charles, 2011) which involved a selection of teachers who volunteered to participate for my study.

In order to obtain my sample, I first submitted an informal research proposal (see Appendix E), along with consent forms (see Appendix D) to both the Complex Area (school district) Superintendent (CAS) and the school principal to first obtain permission to conduct my study prior to the beginning of the 2017-2018 school year; as well formal IRB approval from the University of Hawaii Human Subjects Committee and from the HIDOE. Once I obtained permission from my leadership team (see Appendix C), a flyer (see Appendix A) with an introduction to the Hawaii Lab Cohort (see Appendix B) was sent out by the principal to the

entire staff of 45 teachers that advertised an informational meeting to be held in May 2017 for all interested teachers to attend.

Ten teachers attended the informational meeting to learn more about the HLC and its benefits for teacher professional learning. The informational session began with last year's lab teachers providing a brief overview of the model's framework, the learning cycle, and their experiences of benefits and challenges to teacher and student learning. Teachers were able to ask questions of the past lab teachers and hear about their past experiences with the HLC. After the initial overview was given, the interested teachers participated in a co-construction activity around what the umbrella focus (i.e., content area instructional strategy) of the cohort should be according to the interest of the group. At the end of the activity, they all agreed that they wanted the focus to be "reading assessments to guide instruction in small groups." This umbrella focus for the cohort surprised me since it was not the current instructional focus of the school (which was collaborative conversations). This showed that the teachers felt empowered to co-construct an objective for their learning that was an authentic desire to improve their practice. The teachers who were interested in participating in the cohort were all given a pre-reflection to fill out and turn in within a week if they were interested in participating in the cohort during the 2017-2018 school year.

My goal was to obtain permission from at least six elementary teachers, but not more than eight, in order to form a cohort that was professional, yet still connected (Goodwin, 2014). In the end, however I only had five teachers who committed to participating in their school's HLC cohort. Since the HLC was situated within a Community of Practice (CoP), I wanted to make the participation voluntary, therefore the demographics of teacher participants ranged from

novice to veteran teachers, with a majority representing lower elementary, one from upper elementary, and the school's librarian.

Table 3.1 provides an overview of the participants and a brief description of their backgrounds in teaching.

Table 3.1
Demographic Descriptions of TLC Participants Pseudonyms

Teacher	*Gender*	*Race/Ethnicity*	*Position*	*Experience*	*Grades Taught*
Amelia	Female	Japanese	1st grade	First year teaching in the HIDOE	English in Japan for five years to grades K-9 at a public school
Zoey	Female	Caucasian	2nd grade	11-15 years	All levels K-6. California and Hawaii
Elizabeth	Female	Caucasian	2nd grade	11-15 years	All levels PREK-6. North Carolina and Hawaii
Claire	Female	Caucasian	5-6th grade SPED	5-6 years	K-6 in a gen ed and co-teaching SPED Hawaii and Florida
Sophia	Female	Caucasian	Librarian	6-10 years	All levels K-12. Was a secondary English teacher before becoming a librarian

Amelia. Amelia was a first-grade teacher who was new to the school and the HIDOE that year. She obtained her BA in TESOL education and was interested in English Language (EL)

development. Although being new to the HIDOE, she was not new to the teaching profession. Previously, Amelia taught English in Japan for five years to grades K-9 at a public school.

Zoey. Zoey was a second-grade teacher with 11-15 years of experience. Zoey had been teaching at Aloha Elementary for three years after transferring from another school in the district where she had taught for several years. She had experience teaching all elementary grade levels (K-6) and some middle school. Her work experience had been in Hawaii and in California where she has taught elementary, intervention and Art.

Elizabeth. Elizabeth was also a second-grade veteran teacher with 11-15 years of experience. She had taught all elementary grades PREK-6 on the mainland and Hawaii. She was the Teacher of the Year 2014-2015 at the school she taught at in North Carolina.

Claire. Claire was an upper elementary SPED teacher who brought three to five years of experience. She had taught most grade levels K-6, including SPED. Claire's work experience had mostly been on the mainland and in Hawaii in a variety of classroom settings (e.g., pullout resource special education, push-in special education, general education classroom teacher, inclusion co-teaching classroom, inclusion classroom as general education and special education teacher).

Sophia. Sophia was in her second year at the school and was the school's librarian. She had six to 10 years of teaching working with grade levels K-12. Previously she taught English at a Middle School before taking the job as the school librarian. This was her second year working at the school.

Role of Researcher/Researcher's Positionality

In this study, I was not only the researcher, but also the designer and lead facilitator of the HLC. As the lead facilitator, my job was to organize the teachers' collaborative work and

create learning environments that promoted the sharing and building of new knowledge (McLaughlin, 1993). I did this by helping to facilitate the observational visits and interim meetings that occurred throughout the year, as well as providing individual coaching and feedback on literacy goals sets by the participants. This positioned me as an "insider in collaboration with other insiders" (Herr & Anderson, 2005, p. 30). Herr and Anderson (2005) warned that it is important for researchers to define their positionality in the study, as it will impact how they frame epistemological, methodological, and ethical issues in their study. Taking this warning, next I describe my biases and assumptions.

As the creator and lead facilitator of the HLC model, as well as a mentor to other facilitators implementing HLC models in the HIDOE since 2016, I had already formed beliefs and opinions as to why this approach for teacher professional learning may enhance teacher quality and literacy leadership in our schools. When I wrote my dissertation proposal for this study, I began journaling and reflecting on my biases so I could begin to recognize them and become more aware prior to data collection. One discovery I made early on was how I felt that my research should *prove* that my model was effective as opposed to having an open mind to the finding. For example, I would say to my critical friend, "I want my study to prove how good the HLC is so that more schools would use it as a vehicle for teacher professional learning, instead of what is currently happening (i.e., one-and-done workshops)." My critical friend would remind me that my goal of the qualitative study (or any study) was not to prove. Instead it was to uncover patterns of teachers' experiences and perceptions to model; *if* and *how* it supported their learning and to what extent did they feel it influenced their students' learning. Being given this new perspective, I began to take on the new mindset of a qualitative researcher who was truly open to whatever findings came out my study.

In working with my critical friend and via reflection I began to consider my discourse around my inquiry, I could see how my assumptions possibly clouded my thinking. For example, an assumption I held at the start of the study was that teachers who participated in the HLC would become 'change agents' at their school, as well as have an impact on student learning school-wide. This assumption came from my experience with working with Mahalo Elementary School from 2013-2016. I facilitated a three-year staff development on Guided Reading, along with establishing TLC with teachers from every grade level at the school (see a video of these teachers' stories-Appendix R). As a result, this school's median growth percentiles for ELA rose to 64 and 62 respectively, which meant that the school sustained the highest median growth percentile in their school district for two years in a row. Since the teachers in this study were similar in demographics (SPED teacher, upper and lower elementary), I also hoped for similar results in student achievement with the Aloha Elementary cohort.

Even with all of this past success, I had to take a hard look as to why I was only able to get five volunteers for my study, from the 10 teachers who attended my informational session, after much advertisement and four years of proven ELA success from 2013-2016. What was the established perception of the HLC according to teachers' talk behind walls? Was the HLC designed for all types of teachers? Or was it being perceived for the elite (overachievers) due to the level of rigor and time commitment it takes even though research shows one-shop PD is not as effective (Darling-Hammond, Hyler, Gardner, 2017; Fullan, 2007).Or possibly the HLC just came at the heels of many other district pressures and teachers cannot take one more thing on their plate?

It is no secret how thinly stretched teachers are today, with so many programs to learn, new initiatives to implement, test preparation. When reflecting on all of the expectations placed

on teachers, I also began to reflect on the pressures that I was experiencing as well in implementing and collecting data around the model. Although this was my fourth year in implementing the model, it was also the year that I was collecting data for my dissertation. Of course, I wanted the study to go well from the start, in terms of collecting quality data from the teacher's classrooms, but I also felt tension around the expectations placed on me from my position as the content specialist of the school district. Principals expected to see transformation or transformative practices occurring in their teachers' classrooms. They also expected to see "hard data" showing student achievement from the classrooms of the teachers who participated in the HLC. And I think deep down inside, I really wanted this to occur as well, so that the time, money, and priority that this particular school and these particular teachers were giving would be seen as valuable and was worth the investment. However, realizing that I was also conducting this study to examine my own practice (model), I learned to become more objective and analytical when analyzing the data of the study.

My reflection work while being asked questions from my critical friend allowed me to be vulnerable enough to explore my own practice (model) which meant examining my biases, being critical of my own work, and raising my awareness of the outside factors that may have impacted the outcomes of my study. Taking all of this into account, I was rigorous in how I collected data and tempered the discourse to avoid leading my participants to pick up on my positive biases.

Data Collection

I collected multiple forms of data directly from the research site (i.e., Aloha Elementary school/classroom) and/or participants who answered my research questions. The primary means of data collection in case studies is mostly observation and interviews, with some document and artifact analysis (Creswell, 2013; McMillan, 2008). Since qualitative data are narrative, meaning

the words themselves are considered the data (Mertler & Charles, 2011), I analyzed the words that appeared in the form of interview transcripts, observational notes, journal entries, transcripts of audio or video recordings, documents, and artifacts of data for my study. Specifically, I collected these data sources from: (a) one-to-one interviews, (b) teacher questionnaires, (c) artifacts from the observational classroom visits teachers made to one another, (d) audio-recordings and transcripts of teachers' feedback and discussion during observational visit debriefs, (e) audio-recordings and transcripts of the professional dialogue that took place during HLC meetings and, (f) a researcher's journal. Next, I will explain *how* and *why* I collected each source.

One-on-one interviews. Creswell (2013) stated that the main purpose of conducting an interview is to obtain special kinds of information that cannot be observed. Patton (2015), as cited by Merriam and Tisdell (2015), stated that interviewing is necessary when the researcher wants to understand what is "in and on someone else's mind" (p. 426). Therefore, I selected this method to help me gain specific information from my teachers about their HLC experiences and wanted to capture the teachers' internal feelings about their experiences. I conducted one-to-one semi-structured interviews with every teacher who participated in the HLC in their classrooms at the end of the second semester of 2017-2018. I chose a semi-structured approach since Merriam and Tisdell (2015) stated that interviewing in qualitative studies tends to be more open-ended and less structured. Therefore, in using a less-structured type of interview my participants were able to define their experiences in their own terms, meaning they were able to add information that went beyond the questions that were being asked of them.

Creswell and Plano Clark (2010) recommended that researchers seeking to use interviews as a method ask open-ended questions from one or more participants and record their answers.

For my interviews, I created 19 open-ended questions to help me gather data in order to answer my research questions (see Appendix M). Two examples include:

- What were your reasons (expectations) for choosing to participate in the Hawaii Lab Cohort (HLC) model for teacher professional learning?
- How would you describe your literacy learning around your cohort's area of focus?

These questions served to provide information on the teachers' experiences that could be later used to address the research question: *How do teachers describe their experiences from their overall participation in the TLC?*

In order to ensure that I captured an appropriate amount of quality data, I borrowed from Merriam and Tisdell (2015) and Creswell and Plano (2010) the procedures that informed my interview protocol. These procedures included the following criteria: (1) my questions were aligned with my research questions; (2) I engaged the teachers in an inquiry-based conversation, meaning my questions were aimed to gather information about specific events related to the study; and (3) I was open to receiving feedback from the participants on the questions being asked of them in order to provide clarification if needed. In developing this protocol, I went through many rounds of revisions with my advisor to ensure that I was staying true to the criteria provided before using them in an interview; as well as going back to refine a few questions to be clearer and more concise (i.e., less technical and less academic) after experiencing similar confusion between the first two teachers that I interviewed.

Each of the interviews took place at Aloha Elementary School, after school, inside of the teacher's own classroom, and lasted for about one hour. I felt it important to keep the interviews personable (conversational), flexible and fluid since I wanted them to share their experiences in

an authentic (candid) way. To ensure accuracy, I audio recorded each interview and transcribed them first using the platform Happy Scribe, a speech-to-text transcription platform, then reviewed each transcript manually to ensure the transcription was accurate.

Teacher questionnaires. Throughout this study I collected three questionnaires from the participants to better understand the different aspects of the teachers' experiences throughout the duration of the HLC. I was informed by Mertler and Charles (2011) to include questionnaires as a method to collect data, because it provided a means for teachers to share their responses more fully (i.e., to the extent they feel best) in a written format. More importantly, questionnaires allowed me as the researcher to obtain specific information that would have been hard to capture in an observation and/or meeting (Creswell & Plano Clark, 2010). This was important in helping me triangulate the data, which I will later address in my analysis.

While creating my questionnaires I borrowed suggestions from Mertler and Charles (2011) to support my design. These scholars suggested that "relatively few items should be included, directions should be simple, and responses should be easy to make in order to get an effective return rate" (p. 114). That is, each questionnaire had a unique purpose for capturing their experiences at different stages of the study. Next, I will explain in more detail the questionnaires (pre-study, mid-year, end of year) I used in the study:

Teacher pre-reflection questionnaire (pre-study). At the start of the study, after the informational meeting, I collected pre-reflection questionnaires from all teachers who were interested in being a part of the cohort in order to support the selection of its members (see Appendix G). This questionnaire consisted of three open-ended questions that sought to gain a better understanding of the teachers' intentions for joining the cohort, what area of focus they were interested in exploring, and what attributes (i.e., flexibility, willingness to make their

practice public, becoming a risk-taker) they felt they could offer to the group (e.g., desire to contribute knowledge and resources to the group). Finding out these attributes at creation phase of the cohort was important to me as facilitator and researcher to take into account since the HLC was anchored in a CoP, meaning that it would be critical to the success of the cohort that the participants shared a similar interest in order to conduct joint work, meaning teachers came with a similar desire to create and maintain relationships among other members, and were open to contributing to the practice of the group (Lave, 1991; Wenger, 1998). By collecting their pre-reflections at the start of the HLC, I hoped to understand their intentions for wanting to be a part of the cohort (i.e., the reason behind their interest in cohort's area of focus and what they feel they could contribute to the learning community) in order to compare them to experiences after a year of participation in the cohort.

Teacher community of practice assessment questionnaire (mid-year). This questionnaire/survey assessed teachers' perceptions of the HLC based on the six key dimensions of a Community of Practice (CoP): (i) domain, (ii) community, (iii) practice, (iv) motivation, (v) structure, and (vi) mandate (see Appendix K). By including these questions, I hoped to gain insight into the relationship health of the cohort in order to make any adjustments needed to the HLC. This information also helped me address my research question: *How do teachers describe their experiences from their overall participation in the TLC?*

Teacher questionnaire (end of the year): I used an open-ended questionnaire (see Appendix L) at the end of the year to identify teachers' perceptions of their literacy learning and how those experiences impacted their students' literacy growth after a year of participation in the cohort. This questionnaire provided an anonymous opportunity for teachers to respond freely as it was "less personal in nature" than an interview (Mertler & Charles, 2011, p. 113). I designed

the questionnaire to contain two parts, a multiple-choice section composed of statements that allowed the participants to respond along a Likert scale of "agree…disagree" continuum and a series of open-ended questions. For example, the pair of questions I believe helped me the most are:

- An aspect/s of the HLC model that had the most impact on my learning around my cohort's area of focus was, check all boxes that apply:
  - Observational Visits
  - Getting "actionable" feedback on my goal
  - Receiving targeted PD, resources, and supports to help me achieve my goal
  - Interim meetings as a time for collaboration and learning (i.e., book study, artifact sharing)
  - Receiving "ongoing" coaching and modeling
  - Reflecting and analyzing student work to support my instructional decisions
  - Other: _____
- Were there any aspect/s of the lab cohort experience that challenged or hindered your learning experience?

I also chose to follow each statement with the open-ended question, "Why do you think this?" to allow teachers to expand on their choices on the Likert scale in order to provide more "depth of information" to analyze in the data for patterns and trends around their literacy learning experiences (Mertler & Charles, 2011, p. 113). This information from all three questionnaires helped me to address my main research question: *What*

happens when five teachers participate in a Teacher Learning Community (TLC) for one school year to learn about literacy instructional methods?

Artifacts from classroom observation. Observations are a common primary source of data in qualitative case study research (Merriam & Tisdell, 2015). I chose to use observation as a method since I wanted to study a TLC model anchored in a CoP where teachers learning and dialoguing with one another are essential. There were five classroom observational visits scheduled for the HLC teachers to volunteer to participate in (see Aloha ELA Lab Cohort PD Plan SY2017-2018, Appendix F). With that said, it is important to point out that every teacher in the HLC was observed, including myself, and some were observed twice throughout the course of the academic year. They were not only observed by me, but by everyone in the cohort. Therefore, during these observational visits, all 5 teacher participants including me were present for the observation. See Table 3.2 for the observation schedule that occurred.

Table 3.2

Lab Cohort Observational Visit Teacher Schedule SY 2017-2018

OBSERVATIONAL VISITS	**ELA COHORT**	**TEACHERS TO BE OBSERVED**	**TEACHERS TO BE OBSERVED**
#1	September 14, 2017	Zoey	Elizabeth
#2	November 09, 2017	Amelia	Claire
#3	January 11, 2017	Sophia	Es & Zoey
#4	March 01, 2018	Elizabeth & Es	Claire & Es
#5	April 12, 2018	Zoey	Sophia & Amelia co-taught a lesson

Merriam and Tisdell (2015) distinguished the main characteristics of observations for research in two ways. “First, observations take place in the setting where the phenomenon of interest naturally occurs; second, observational data represents a firsthand encounter with the phenomenon of interest rather than a secondhand account of the worlds of collecting data” (p. 137). Following their advice, I made several types of observations in different settings, such as the classrooms my participants taught in, during our observational debrief sessions, and at our interim meeting sessions.

Merriam and Tisdell (2015) state that observations are determined by several factors, the most important being the researcher’s purpose for conducting the study in the first place. In my study, one of my research questions was to understand what impact (if any) did their participation in the HLC have on their professional literacy learning (i.e., influence on instructional decisions). To best discover this, I observed and recorded the interactions of the teachers during the observational visits, such as what type of feedback the teachers offer one another during our professional dialogues. In addition, I looked to the content of the conversations that occurred in each setting (i.e., the type of feedback or praise they offer to support the teacher’s practice) and how the teachers’ comments on their participation supported the observed teacher’s reflection process and their own professional learning. Finally, I examined my own role during each observation to see how what I did or said impacted what I was observing in my researcher’s journal. As the participant observer (Spradley, 2016) I was required to be “present at, involved in, and actually recording the routine daily activities with people in the field setting”; therefore, I audio-recorded and transcribed the observational debrief and interim meeting sessions to help capture this data (p. 53).

I was also informed by Puig and Froelich (2007) and Merriam and Tisdell (2015) regarding the design and purpose of the following research observation protocols forms used. Consequently, for systematic organization and for different purposes, I created three types of observational forms, which I will explain next. For this study, I also collected several types of artifacts to support me in exploring my research questions at a deeper level. According to Merriam and Tisdell (2015) documents and artifacts are ready-made sources of data easily accessible to the researcher that can exist both in a physical setting or on-line. Documents can be a "wide range of written, visual, digital, and physical material relevant to the study"; where artifacts are usually three-dimensional physical objects (p. 162).

For my study, I collected teachers' personal documents, which refer to "any first-person narrative that describes an individual's actions, experiences, and beliefs" (Bogdan & Biklen, 2011, p. 133). This included teachers' quarterly goal sheets, lab observational debrief forms, teachers' file folder reflections, and audio transcripts of debrief sessions and interim meeting professional dialogue. Next, I will describe each artifact and document I collected to inform the analysis of my study.

***Teacher goal reflection sheets*.** Teachers created four individual quarterly goals aligned to their cohort's umbrella of focus for the academic school year 2017-2018. At the start of each quarter, I provided the teachers with a goal reflection sheet to identify their instructional goals that connected to their cohort's umbrella focus (see Appendix H). The purpose for these goal reflection sheets, as it related to my study, was to understand the learning goals that the teachers had set for themselves, in order to provide them feedback and resources to support their efforts, as well as to direct the focus and collaboration of the HLC (i.e., observational visits, discussions during interim meetings, PD). The goal reflection sheets also provided me evidence around the

teachers' individual instructional goals and their plan to apply their learning in the HLC to their classroom practice, as well as acted as a source of reflection at the end of the year on the attainment of their goals.

Lab observational feedback forms. During each observational visit, all participants used the Lab Observational Feedback Forms (see Appendix I) to take observational notes in order to provide the observed teacher feedback on their chosen lens of focus which connected to their individual teacher goals. Puig and Froelich (2007) advised that observational notes taken by the observer should never offend or threaten, but prompt a dialogic conversation, one that refers to a responsive conversation, between two colleagues. Therefore the form was designed to include a two column note section where the observer used the following prompts: *I noticed* (what you saw and heard); *My thinking about this* (wondering, questions, ideas, etc..)…to reflect and provide the teacher "highly descriptive" feedback on their area of focus (Merriam & Tisdell, 2015, p.150). By highly descriptive, Merriam and Tisdell explained that there should be enough detail that the reader of the notes should feel that they are reading what the observer did while observing.

The form also included a section for the teacher observer to reflect on implications for their own practice after the observation. Merriam and Tisdell (2015) stated that this is an important component to include since it engages the observer in some preliminary data analysis before providing feedback. The data collected on these forms supported me in understanding my research question: *How does participation in the TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?*

Lab observational visit debrief form. This form allowed me to scribe and record the debrief conversation of the visit among the teachers to look for patterns and trends in the

feedback that the observed teachers received in order to support their instructional practice (see Appendix J). I was informed by Hattie (2008), Venables (2011), and Wiggins (2012) to divide the form into three parts: (1) *Wows!* -which compliments the teacher's practice and holds the teacher's identity intact, (2) *Wonderings* -which are clarifying questions that the observing teachers might have in order to provide them with actionable feedback around their lens of focus, and (3) *Actionable Feedback* -which is goal oriented and specific in nature. During the debriefing sessions, I prompted the teachers to look at their observation forms and reflect on 1-2 *"Wows"* they observed in the lesson that they could share with the observed teacher. We would then do a quick whip around the table to allow all participants, including myself to share. Then teachers were prompted to go back to their observation forms and find any *Wonderings and/or Actionable Feedback* for the teacher in order to extend their practice around their lens of focus (purpose) for the visit. This process of facilitating this type of professional dialogue helped the observed teacher to "re-see" their practice through the eyes of their peers and push everyone in the cohort to extend their thinking (Houk, 2010).

The debrief form also included a section at the bottom for the observed teachers to reflect on the feedback they received from the group and share one or two practices and/or strategies they would take back to implement in their classrooms to support their instructional goal for that quarter (see Appendix I).

***File folder reflections*.** At the end of every observational visit, I allowed time for the teachers to provide me with any additional feedback on their experiences of the day, ask any questions they still may have had, or communicate any personal need to me directly inside of a file folder without needing to share it with the rest of the group. When I returned to my office after each observational visit, I spent time reviewing, reflecting, and responding to any messages

that were in the folders. These sources of data helped me reflect on my own instructional practice of facilitating the HLC, as well as provided me information to better meet the needs of the teachers participating in the group. I also used this data to provide me with an additional data source to validate some of the themes in the data*: Sense of Belonging, Application,* and *Feedback,* since they were all mentioned in this data source.

Audio-recording and transcripts of professional dialogue & feedback. There were four debrief sessions and seven interim meetings that occurred during and after school for the HLC to participate in (see Aloha ELA Lab Cohort PD Plan SY2017-2018, Appendix F). During these times I audio-recorded our meeting discussions to capture the teachers' conversations around teacher learning, problems of practices, reflection on student work, etc.

Debrief meetings "audio-recordings" of conversations. I audio-recorded our debrief sessions to capture the HLC teachers' professional dialogue and feedback of the classroom visits, instructional strategy implementation, and discussions around student learning. It was an important tool to use during the debriefing process, since as the facilitator and scribe of the notes during this time, it ensured better accuracy of the data for reflection. By collecting this data, I hoped that it would give me additional insight to address my research sub questions regarding: *How do teachers describe their experiences from their overall participation in the TLC; How does their participation in the TLC impact the teachers' literacy learning and their perceptions of what impact the TLC had on their students' learning?*

Interim meetings "audio-recordings" of conversations. There were seven interim meetings that occurred after school and five observational visits scheduled for the HLC teachers to participate in (see Aloha ELA Lab Cohort PD Plan SY2017-2018, Appendix F). The term "interim meeting", in the HLC context, pertains to after school monthly meetings that were held

once a month in the library for 1.15 hours. These meetings always followed a predictable agenda of (1) beginning with a community energizer to transition the teachers from the school day in to lab time, (2) sharing of teacher and student artifacts that aligned to the teachers' quarterly goal, (3) reflecting on student work and the teacher's impact on the learning, (4) studying portion of anchor text, (5) planning for next steps. During these meetings I recorded our meeting discussions to capture the teachers' conversations around teacher learning, artifact sharing, problems of practices, and analysis of student work, etc. By collecting this data, it gave me additional insight to address my research sub questions regarding*: How their participation in TLC may have impacted the teachers' literacy learning and their perceptions of what impact the TLC had on their students' learning?*

Researcher's Journal. Keeping a researcher's journal during the course of the academic year was a vital data source to record my thoughts, feelings, and reactions to the phenomenon being studied; especially my level of participation (Herr & Anderson, 2005). Mertler and Charles (2011) suggested that Journals provide an opportunity for the researcher to maintain a narrative account of their professional reflections on practice. Therefore, my intent in keeping a researcher's journal was to allow me to record a number of ideas before and after every event (i.e., interim meetings, observational visits, emails sent out to teachers) in order to document and make thoughts, intentions, and experiences explicit around my research questions. The Journal I kept was very structured and followed Freese's (2006) three-part reflection model. This model includes an anticipatory reflection, contemporaneous reflection, and retrospective reflection (Baird, 1990; vanManen, 1991 as cited by Freese, 1999) which were important for me to use in order to systematically gather and reflect on how my 'intentions' for each learning activity were

aligned with my pedagogical beliefs. Since my Journal served to document my own research decisions (i.e., record my thoughts, hopes and feelings around the event; and document my understanding of the phenomena being studied), I chose to use the following prompts suggested from Herr and Anderson (2005): "What were my intentions?" (of the event or experience) and "What really happened?" to provoke my thinking and reflection on my research questions (see Appendix Q for an example of a Journal entry). This Journal was kept throughout the duration of the data collection period with a total of 76 entries. All of my notes were backed up online using the Microsoft Word application.

Data Analysis

In qualitative research, data analysis needs to be organized, transcribed, coded, summarized, and interpreted by the researcher (McMillan, 2008). According to Merriam and Tisdell (2015), qualitative data collection and analysis are activities that need to happen simultaneously since "emerging insights, hunches, and tentative hypotheses" can influence the next phase of data collection (p. 191). Merriam and Tisdell (2015) warned that it is important for the researcher to keep in mind that "without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed" (p. 197).

Organizing the data. From the start, I looked for ways to create a system to organize and analyze the data during the ten-month period of my study in order to reduce the large amount of qualitative data at the end to interpret. Since I wanted to make sure that I told the stories of my teachers using their voices when writing up my research, I decided to follow Yin's (2009) advice to find a platform that could help me to create a "systematic archive of all the data" in a way

where the data could be easily retrievable in order to go back to it again and again (p. 238). Creswell (2002, 2013) also advised the importance of making the text data gathered visible by labeling them into categories using computer programs (e.g., HyperRESEARCH, NVivo, Dedoose, etc.) to help to store, organize, and display the codes of data, a critical step in the qualitative data analysis. Therefore, I chose the NVivo qualitative data computer software to support me with my own data collection and analysis process for this study.

Coding the data. Since the analysis of qualitative data involves the reduction of a large amount of data usually by a process of categorizing and grouping similar types of information, Creswell (2002) described a systematic process (protocol) of data analysis that included (1) organizing and preparing data for analysis, (2) reading through the data for patterns, (3) coding the data, (4) grouping according to themes and descriptions, (5) interrelating themes/descriptions, (6) interpreting the meaning of themes and descriptions (p. 185).

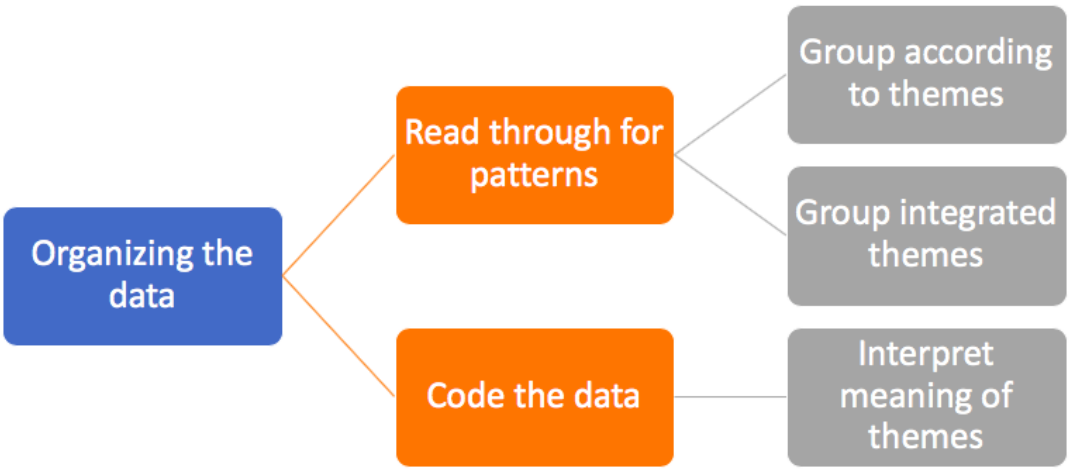


Figure 1.2 Flow Chart of Data Collection Process- Creswell 2009 Protocol

I followed Creswell's (2009) protocol to come up with preliminary codes/themes of analysis.

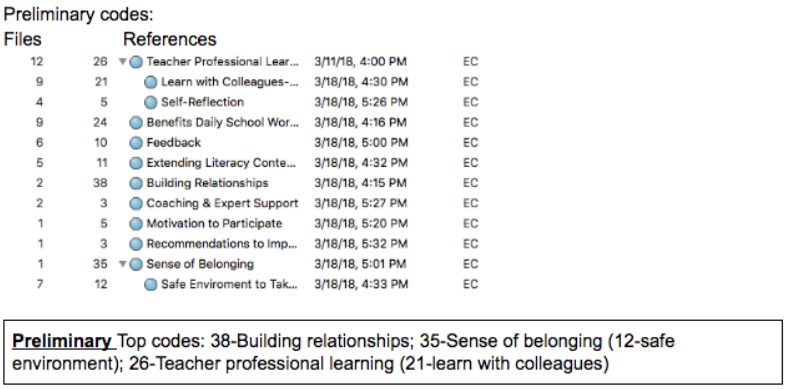


Figure 1.3 NVivo Preliminary Codes- Creswell 2009 Protocol

However, when reflecting upon them, I felt that many themes were very broad and contained sub-codes that still needed to be unpacked. Therefore, I looked to other educational researchers' protocols to provide me more clarification on the process.

Merriam (2001) stated that "making sense out of data involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read--it is the process of making meaning" (p. 176). Merriam (2001) clearly stated that the purpose of making meaning of the data is primarily to answer your research questions which are central to the process. Therefore, I began my data analysis process by identifying segments (units of data) that would potentially help to address these research questions. Merriam (2001) described a unit as "any meaningful (or potentially meaningful) segment of data; it can be as small as a word a participant used to describe a feeling or the phenomenon. She offered two main points of criteria

for researchers to consider: (1) the unit should reveal information that is relevant to the study and helps the researcher think beyond the particular bit of information; (2) the unit should be "the smallest piece of information about something that can stand by itself" (p. 177). These bits of information (codes) are then brought together to make categories that often are subdivided into subcategories. "The names of the categories and the scheme you use to sort the data will reflect the focus of your study" (Merriam, 2001). In following this advice, I then created a table where I organized which method for data collection (e.g., observations, documents) best provide me evidence needed to answer each of my research questions. I then used this table in NVivo in order to organize the data into categories of my methods from my study.

Table 3.2

Sorting of Methods to Answer Research Questions

Data Sources	*RQ Evidence*
Observations *Lab Ob feedback* *Debrief form* *Debrief audio* *Interim audio*	#2 How does participation in the TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)? #3 What are teachers' perceptions of students' literacy growth?
Interviews *End of year 1-1* *Lab video 2 interviews**	#1 How do teachers describe their experiences from their overall participation in the TLC? #3 What are teachers' perceptions of students' literacy growth?

Questionnaires *Prereflection* *Semester 1 Reflection* *CoP Survey* *End of year-Google*	#1 How do teachers describe their experiences from their overall participation in the TLC? #2 How does participation in the TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)? #3 What are teachers' perceptions of students' literacy growth?
Documents & Artifacts *Teacher goals* *File folders reflection* *Researcher Journal* *PDE3 Portfolio Reflection*	#1How do teachers describe their experiences from their overall participation in the TLC? #2-How does participation in the TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)? #3 What are teachers' perceptions of students' literacy growth?

Coding qualitative data. After all of the data was collected and categorized within NVivo, I began an intensive analysis of the data beginning with open coding of each method. Merriam (2009) called this first step in the qualitative analysis process *category construction.* This is where the researcher begins to have a "conversation with the data by jotting down notes,

comments, observations, and queries in the margins" (p. 178). For me, this meant that I needed to ask more questions of my data and write down notes that were more aligned with my research questions and/or theoretical framework to gather patterns of codes.

Both Merriam (2009) and Yin (2009) warn that qualitative data analysis is a complex process that involved moving back and forth between "concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation. These meanings or understanding, or insights constitute the findings of the study" (Merriam, 2009, p.176). These new meanings become organized in the form of descriptive accounts, *themes*, or categories that are used to explain the data. To evidence my coding process and conversation of the data see Figure 3.4 for an example.

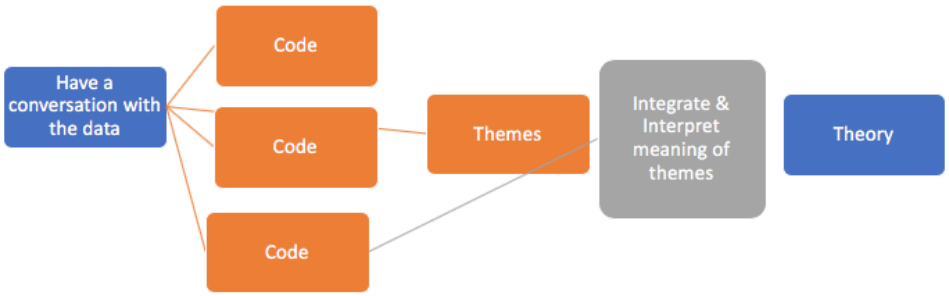
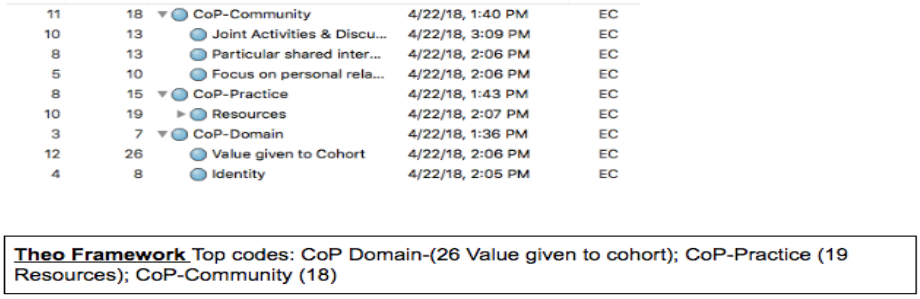


Figure 3.3 Flow Chart of Coding Process Table

By going through this process of making notations next to the data, I began placing the data into categories/themes that I felt relevant for answering my research questions. In order to try to make this process more systematic for the purpose of informing my study, I used the Merriam and

Tisdell's (2015) suggestion of taking the codes and placing them into categories/themes that related to my literature review and my theoretical framework. To reflect this part of the process, see Table 3.5 to view the categories that I identified the main themes related to my theoretical framework.



11	18	CoP-Community	4/22/18, 1:40 PM	EC
10	13	Joint Activities & Discu...	4/22/18, 3:09 PM	EC
8	13	Particular shared inter...	4/22/18, 2:06 PM	EC
5	10	Focus on personal rela...	4/22/18, 2:06 PM	EC
8	15	CoP-Practice	4/22/18, 1:43 PM	EC
10	19	Resources	4/22/18, 2:07 PM	EC
3	7	CoP-Domain	4/22/18, 1:36 PM	EC
12	26	Value given to Cohort	4/22/18, 2:06 PM	EC
4	8	Identity	4/22/18, 2:05 PM	EC

Figure 3.4 First Attempt Coding Around CoP Theoretical Framework

Grouping data according to codes and themes. As a novice case study researcher, I became challenged in trying to make sense of all of the qualitative data I collected. I preformed several rounds of coding the data to help me arrive at categories/themes that were relevant in answering my research questions. The first round was about coding for preliminary themes across all methods used in the study. The second round of coding included more focused codes/patterns around the key elements of my theoretical framework, and finally the third round was based on three particular methods: the prereflection, semester 1 reflection, and end of the year interviews in order to analyze their experiences before, during, and after their participation (See Table. 3.4.).

Table. 3.5

Alignments of Rounds of Codes with Multiple Data Points

Preliminary Code (1st round)	More Focused Codes	Before/During/After
	Theoretical Framework	Codes
Building Relationships	CoP Domain-Value given to cohort	Building Relationships
Sense of Belonging	CoP Practice-Resources	Sense of Belonging
Teacher Professional	CoP-Community	Teacher Professional
Learning		Learning
Learning with Colleagues		Benefits to Daily Work
Safe Environment to Talk		

I also looked to Merriam and Tisdell (2015) to provide me a set of criteria to apply when constructing categories during data analysis process. They stated that categories should be: *exhaustive* (enough to encompass all relevant data), *mutually exclusive* (relevant enough to only be placed into one category), *sensitive* to the data as possible (naming category), and *conceptually congruent* (all categories are at the same level of abstraction).

Disconfirming data. I used the code (lens) of "tensions and challenges" when I reviewed the data and discovered some trends around the Educational System (HIDOE as whole and expectations placed on teachers) and around the teachers' understanding of the HLC model process.

Many teachers expressed frustrations between the discrepancy of what was expected of them to accomplish as teachers and/or the goals that they have for themselves as professionals.

Another discrepancy that many teachers spoke about in this theme was not having enough time and/or support throughout the day to meet with their students (e.g. many were being pulled out of their classrooms for Response to Intervention (RTI) or other services) or being overscheduled with other meetings (e.g., attending Individualized Education Plan meetings) or other school committees that they participated on (e.g., Instructional Leadership Team (ILT), data teams).

Other tensions and/or challenges that occurred were what the teachers shared their overall understanding of the HLC cycle of learning within the first semester (e.g., wanting to see a visual of the big picture of the model). Many shared that this hindered their process in the beginning, however, once they became more familiar with the process, they shared that it then supported their own learning in order to impact their students' learning.

Another interesting piece of data that I had to make meaning of had to do with the "type" of teacher who joins the HLC. From my own observation and our one-to-one interviews at the end of the year, it was evidenced that they all brought a strong sense of teacher agency and commitment to growing themselves in their profession in order to be the best teacher for their students. This often meant that they were involved in multiple groups at their schools and in their communities, which did not allow them to give 100% of themselves to the process or the HLC cohort. I will unpack this further in Chapters 5 and 6.

Ensuring Credibility and Validity

There are many perspectives that exist regarding the importance of credibility and validation in qualitative research. According to Merriam and Tisdell (2015) ensuring validity in qualitative research involves conducting the investigation in an ethical manner. These ethical practices are what bring trustworthiness to the study. Creswell (2013) stated that validity in qualitative research does not carry the same connotations as it does in quantitative research, "nor

is it a companion of reliability (i.e., consistency in responses) or generalizability (i.e., the external validity of applying results to new settings, people, or samples) (p. 190). Instead, qualitative validity indicates that the researcher checks for accuracy of the findings using certain procedures and checks those procedures across different researchers and different projects that involve a similar type of study (Creswell, 2013; Herr & Anderson, 2005). In order to do this well, Creswell (2013) suggested qualitative researchers use validity strategies within the proposal of their study to "enhance" the researcher's ability to assess the accuracy of the findings, as well as convince the readers of that accuracy. Although eight strategies were recommended, for my study I implemented the following four.

Triangulate the data. The strategy of triangulation makes use of *numerous* data sources to provide corroborating evidence (Creswell, 2013; Merriam & Tisdell, 2015). Maxwell (2013) defined triangulation as "collecting information from a diverse range of individuals and settings, using a variety of methods" (p. 128). In my study, I used multiple data sources of information to establish justification for my themes established in my findings. Triangulation of the data was important to me since I understood that as a qualitative researcher I can never really capture objective "truth" or "reality"; therefore comparing multiple sources of data reduces bias and can increase credibility of the results of the study (Merriam & Tisdell, 2015, p. 244).

In order to verify meaning and achieve valid findings, I applied the strategy of triangulation to my data analysis process. First, I collected multiple sources of data including keeping a researcher's journal, individual interviews, questionnaires, recorded observations, and multiple artifacts in the form of written documents to compare and cross-check throughout different points in time throughout the study (Creswell, 2013). Then, over the course of the year, I analyzed the findings within and between each data source for patterns and trends. I used the

patterns to create themes. I then took those themes to compare across all data sources used in the study. When a theme matched with three or more data sources the finding was triangulated and became an overarching theme to help me answer my research questions. By collecting and analyzing multiple pieces of data that all point to the same outcome, such as sense of belonging, I can feel confident in the findings that I am reporting out.

Use member checking. In this validation strategy, the researcher solicits the participants' views of the data collection and the interpretations of those views (Merriam & Tisdell, 2015; Creswell, 2013). Maxwell (2013) provided further elaboration on the use of member checks by reminding the researcher of the importance of "…systematically soliciting feedback about your data and conclusions from the people that you are studying…is the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on…" (p. 126). By following these recommendations, I can provide an opportunity to my teacher participants to determine if what I have recorded was intended through their actions, therefore, allowing me to correct any errors or challenge any perceived wrong interpretations.

To determine the accuracy of my study's findings (i.e., themes, descriptions), I shared my final draft with the teacher participants in the study for feedback on accuracy of what was recorded. Merriam and Tisdell (2015) defined member checks as the single most important way of ruling out the possibly of misinterpreting the meaning of what participants say or do. I did this by sending them the draft (with a few weeks to review) and then scheduled follow-up meetings with the teacher participants to give them opportunity to comment on my findings.

Use rich, thick descriptions. The use of this validation strategy is often associated with qualitative research. In this strategy, the researcher uses "rich, thick descriptions" of the

participants, setting, and bounded system or cases in great detail (Creswell, 2013). For my study, I used descriptive language in my analysis to convey my findings in the study in order to paint a picture for the reader of the setting, the participants, and the experiences/events that take place during the study (Creswell, 2013; Merriam & Tisdell, 2015). This was important to my study since I chose to use a qualitative case study approach which required the researcher to provide detailed descriptions in order to help the reader co-construct the information to other settings.

Clarify the bias of the researcher. Merriam and Tisdell (2015) stress that this validation strategy is particularly important in qualitative research, that the researcher identifies his or her bias from the outset of the study so that the reader understands the researcher's position and any biases or assumptions that may impact the design or analysis of the study. According to Creswell (2013), "In this clarification of bias, the researcher comments on past experiences, biases, prejudices, and orientations that have likely shaped the interpretation and approach to the study" (p. 251). In my study I tried to clarify the bias that I bring as the creator and facilitator of the curriculum that I would like to examine. I used self-reflection in the form of journal writing as a way to be open and honest with my readers and to aid me in interpreting my findings.

Limitations of the Study

There are limitations to this study. Limitations have been defined in the research as "potential weakness or problems with the study identified by the researcher" (Creswell, 2002, p. 253). Since I used a convenience sample of five teachers from Aloha Elementary who had volunteered to participate in the HLC model for their own professional learning the year that I happen to be conducting this study, I knew that I would not be able to make broad generalizations about the findings from this study because of the sample size of the cohort. Second, being the creator, facilitator and researcher of the model and the study posed a threat of

researcher bias to this qualitative study. I have taken precautions to prevent this by being transparent in stating my position as the researcher up front in the study, as well as keeping a researcher's journal as a method of data collection to support triangulation.

Concluding Remarks

The methods described in this chapter provided a framework for my data collection and analysis that led me to five themes. In Chapter 5, I will share my findings as I triangulated all the data sources that also include rich descriptions and data exemplars from the teachers to support these findings.

CHAPTER 5. FINDINGS

To recapitulate, the purpose of this qualitative action research case study was to understand and examine the teachers' overall experiences of the Hawaii Lab Cohort (a Teacher Learning Community model) regarding its impact on their literacy learning and their perceptions of how their participation impacted their students' literacy growth. Additionally, I wanted to explore my own practice and beliefs that I had incorporated into the design of the model to support my own personal and professional growth.

The data collection was based on a single case involving five teacher participants. As the researcher–participant, I used case study methodologies and the following data sources: (a) one-to-one interviews, (b) teacher questionnaires, (c) documents and artifacts from observational visits made by teachers in one another's classrooms, (d) audio-recordings and transcripts of teachers' feedback and discussion during debriefs following observational visits, (e) audio-recordings and transcripts of professional dialogue during the Hawaii Lab Cohort (HLC) meetings, and (f) a researcher's journal.

All findings presented in Chapter 5 seek to answer my main research question: What happens when five teachers participate in a TLC (i.e., the Hawaii Lab Cohort) for one school year to learn about literacy instructional methods? As well as the following sub questions:

1. How do teachers describe the experiences they gained from their overall participation in the TLC?
2. How does participation in the TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?
3. How does participation in the TLC impact students' literacy growth?
4. How do I align my practices with my beliefs?

The data analysis described in this chapter yielded five themes and 20 subthemes. In order to convey these teachers' stories in their own voices, I organized my data around themes in order to support each one.

The data analysis follows in two sections. Section I provides an analysis of the findings and introduces the five unifying themes. Section II includes my findings in a parallel reflection of my beliefs and values with regard to professional learning and the events that occurred during the study as documented in my researcher's journal to support or reframe my thinking. In addition, a table of the values and beliefs I applied in designing the HLC includes themes and subthemes along with descriptions, reflections, and the reframing of my beliefs about the HLC process.

Analysis of the Findings

In the following section I explain the themes that I systematically identified from the data. Specifically, the one-to-one interviews, questionnaires, and artifacts provided the richest data evidence in supporting the reoccurring and interwoven themes centering on the teachers' experiences. These themes provided a structural framework and a means to capture teachers' experiences in order to give them voice in the study. Overall, sense of belonging became one of the most pronounced themes of the study, almost acting like an umbrella theme that many other themes cross-over or over-lap. To distinguish each of the five themes, I introduce each one with a vignette or a quote to provide a window to the teachers' experiences throughout this chapter.

Sense of Belonging

> What do I know *for sure*? Well, I know for sure that I feel like my craft has improved. I've gained some new knowledge under my belt. You know, I've learned *a lot* about

> myself and maybe something of what to do and what not to do with my data. I also now know that I have great people that I can use as resources and I can rely on, so I feel like of all of those things . . . the bonus was, you know, meeting the great people and getting to know others. . . . It is kind of like the cherry on top. (Elizabeth, interview May 14, 2018)

Elizabeth's statement was noteworthy. She had joined the HLC to improve her individual professional practice, yet the relationships and the feeling of belonging to a community were unforeseen added benefits of her participation. For example, her stating that her cohort members were the "cherry on top" of her learning experience showed how much she valued growing in her own craft and constructing knowledge with others. Elizabeth was not alone in expressing appreciation for her cohort members. In fact, all the teachers reported that they experienced a sense of belonging to a community. In examining reasons for why this experience was so strong, I found multiple nuances presented as subthemes below that connect to sense of belonging. These sub-themes include (a) voluntary participation and individual choice, (b) shared goals/vision, (c) professional relationships, (d) multiple perspectives extending learning, and (e) cohort members and facilitator as resources.

Voluntary participation and individual choice. Teachers cited that choice and voluntary participation, as opposed to mandatory participation, brought together like-minded people with similar beliefs, values, and prior mindsets which improved their learning and added to their sense of belonging/community. In reflecting on the teachers' statements about feeling a sense of belonging, four of the five attributed their ability to join the cohort voluntarily, as opposed to being required to do so, as an important condition.

This voluntary characteristic of the HLC was critical for Zoey, who was in her second year of participation in the lab. Zoey expressed in her one-to-one interview,

> "I think we all are in it… I mean we all chose to be in the lab cohort to grow our practice to become better teachers ...so we kind of all have the same goal or the same vision. And the relationships we've built of course helps to help each other." (May 29, 2018)

Amelia shared in her interview how important voluntary participation was when it comes to teachers engaging in their own learning. She explained:

> When I go to other PD courses, I noticed that some people were sleeping. . . like . . . they're forced to be there. But I feel like with this . . . it is a choice. You know we have a choice to be here. And I like that because it's a choice. You're with people who have . . . the same goals in mind. (Amelia, interview, April 24, 2018)

This voluntary characteristic of the HLC was important to all of the teachers, but it was especially important to Sophia, who as a librarian had a role that was very different from the other teachers in terms of her daily interactions with students. Her motivation in joining was to collaborate with classroom teachers at her school to extend her own literacy practices. Therefore, it was important to her that the teachers brought with them a desire to work collaboratively. Sophia talked about her past Professional Learning Community (PLC) experiences at her previous school to provide context: "They [PLCs] were mandated, . . . so I think you had people who were just there because it was mandated, and . . . it felt like one more meeting." She also pointed out the difference between her previous experience and with her HLC experience: "I think the voluntary versus mandated makes a really big difference. You have people who want to be there for one reason or another." Sophia's observation clearly pointed to the low energy levels or lack of motivation that some teachers who felt forced to attend the PLCs brought with them.

Sophia went on to point out how being able to voluntarily come together around a particular focus, but still being allowed to have individual choice on what to focus on, allowed her to participate in the cohort as a librarian. This individual choice allowed for Sophia to participate in the community even though she was not a classroom teacher, because she was interested in growing her practice around the same content area focus.

This value that the teachers placed on voluntary participation really resonated with me since it is one of the key components of the model. In reflecting on an entry in my research journal on May 10, I noticed that I was pleased that the principal also acknowledged this in his email out to his staff encouraging "All and any teacher who was interested in participating to attend the informational meeting." His encouragement and sharing of this value to his staff helped to place this aspect of the model front and center for his school lab.

Shared goals/vision. Having a common content focus or goal (i.e., umbrella focus) co-constructed by the teachers in a TLC allowed them to learn in a collaborative setting while still honoring their individual learning needs as a teacher. This shared vision for learning also supported the quality of the relationships they were able to form which ultimately contributed to feelings of belonging within the cohort. As the facilitator of the HLC, I was not entirely surprised that shared goals became a subtheme. Coming together around a content focus is one of the main tenets of the model, yet to see this translate into the data showed its importance among the teachers. For example, Sophia stated that one of the major aspects of her experience with the HLC was how having one unifying factor allowed for personalization: "The idea of having the umbrella focus be a unifying factor (of the cohort), but that each person can make their own raindrop underneath that umbrella allows for the individuality." She went on to share in her one-to-one interview:

> It is a deeper form of unity, I think, . . . having that common language and a common understanding; but the way that it's specifically manifested is different. . . . In our particular group we have a more unified understanding of assessment of the elements of literacy, . . . what engagement looks like, for example, you know. But then how we actually put that into action looks different. (Sophia, interview, May 14, 2018)

Therefore, having a common vision for learning that still allowed for an individual focus brought the teachers together around a common language and understanding which contributed to their sense of belonging to the cohort. Zoey similarly expressed how a shared vision of an instructional practice contributed to the types of relationships they were able to build in the cohort. She said:

> I think we all are in it. I mean we all chose to be in the lab cohort to grow our practice to become better teachers, . . . so we kind of all have the same goal or the same vision…And that contributes to the relationships we've built, of course…[because] we help each other. (May 29, 2018)

These teachers were not alone in their attitudes toward how a shared vision supported the sense of belonging in the group. All five teachers indicated that having a shared vision was critical in facilitating their overall learning experiences because it supported the quality of the relationships within the group. For example, in their responses to the anonymous Community of Practice Midyear Reflection Survey, all the teachers shared a similar view on this topic. They were asked to respond to the following questions: *Being a part of the lab helps me build relationships. Why do you think this? Could you provide an example?* The teachers anonymously responded with three of the five strongly agreeing with the statement and two of the five agreeing. Three of the five teachers attributed their agreement with the statement to trying to

"achieve one common goal" and building common knowledge together. They were able to relate to one another more deeply than they had before.

Other qualitative responses included the following:

"Lab brings colleagues together who have a common purpose. We support each other not only at observation and meetings, but during school."

"We all share a common ELA goal, and we're all willing to help one another."

"We all have a common goal and want to strengthen our skills."

"All of us have intentionally chosen to work together and take risks together so that we will improve our practice. We have created a community of learners by being honest and there for each other."

"We exchange our successes and our challenges, and it helps us develop a sense of community."

"I find other ways to relate to people I ordinarily wouldn't. It gives us something we can both relate to start the conversation, and then get to know each other and depend on each other after we have formed that bond. I am also able to get to know others' strengths and know I can go to them for ideas to work on our goals together."

Another factor the teachers cited was how their commonality of goals brought together like-minded teachers, which contributed to creating a sense of belonging in the cohort. This opportunity was significant for Claire, who said in her one-to-one interview, "To be able to have this outlet, . . . where there are other people in the world, like me, who wanted to learn more and grow. . . . That was super!" Claire went on to talk about the significance of collaborating with like-minded people:

> Through the Hawaii ELA Lab Cohort, I was able to collaborate with other like-minded teachers. As we all worked toward similar goals, we were able to support one another through observations, actionable feedback, and book talks. (Claire, end-of-year survey, May 2018)

In wanting to know if other teachers shared this same excitement (or felt the same), I looked to other data sources to confirm if others felt these like-minded connections were important. I discovered the teachers' file folders (artifact) provided me with personal feedback after our observational visit days, that both Elizabeth and Amelia mentioned how the "positive energy of the group" really supported their own learning process. An entry that Amelia made after our observational visit during the third quarter really spoke to this excitement:

> I love being able to collaborate with my lab sisters. It was really eye opening and I saw the value of sharing ideas and goals for the same lesson. Watching someone else teach the lesson I taught helped me thinking about my own teaching practices and what I can do to improve. I am going to miss lab. I hope I can do it again in the future with another amazing team of people. (Amelia, file folder artifact, March 18, 2017)

The ability to voluntarily come together to learn with other "like-minded" teachers around a shared vision/goal helped to build strong professional relationships among all members of the cohort, reinforcing their sense of belonging.

Professional relationships. Participation in a school-level cohort appealed to many of the teachers because it provided an opportunity for them to feel emotionally (i.e., relationships) and pedagogically (i.e., knowledge and resources) supported in their own individual professional learning. The data showed that the focus on professional relationships in the cohort was one of

the main drivers for many of the teachers to join and remain committed to the HLC process throughout the year.

Zoey, a lab teacher a year earlier, expressed in her pre-reflection questionnaire that the focus on relationships was one of her main drivers for joining this cohort. She said, "There are many reasons I want to participate in the Lab, but the most important are the positive relationships I will build with colleagues." In Zoey's interview at the end of the year, she stated that when comparing her experience in the HLC to other PLCs or learning communities, she felt more supported in HLC:

> Like in data teams we have that professional cycle and we all do it, but the feeling is different. . . . It's not like lab cohort. . . . You're supported. We're supported by you, the leader. We are supported by our colleagues. (Zoey, interview, May 29, 2018)

Cultivating professional relationships was also an important factor for Sophia. She too commented in her pre-reflection that one of her main reasons for wanting to participate in the HLC was that she "liked the possibility of developing meaningful professional relationships with other teachers at her school in order to grow roots in her community." This desire may have been contributed to the fact that this was only her second year at the school, and she was still developing her professional relationships at the school.

Although support from all members of the group was important to Zoey and Sophia, the data from the anonymous CoP midyear reflection survey revealed other teachers had similar experiences. For example, one teacher said, "I have become very close to the people in lab, and it makes me feel like I have a school ohana [family]. We have even gotten together outside of school." Another stated, "My lab sisters pop by my room throughout the week and check in on me. I love the relationships that I have built through the lab cohort. I have gotten to know

teachers who I might not hardly see otherwise." These statements are evidence that the teachers felt emotionally and professionally supported by their cohort members which contributed to the quality of their professional relationships that they were able to build with one another. I also observed this in my own reflection journal that I too felt supported by the teachers in implementing the HLC learning process. For example, by our second observational visit (which also happened to be the day that the teachers were being filmed for a HIDOE teacher collaboration video) I wrote in my journal how "amazed" and "impressed" I was with how the teachers showed up and fluidly went through the day without a hitch. I wrote:

> I am always amazed with how much work goes into a lab observation day; how I wonder and worry if everything is going to go well, but then with the support of the teachers, everything seems to come together at the end. Today was jammed packed with the observational visit and coordinating the filming of the day. The teachers all came dressed up for the interviews, ☺ And Claire and Zoey both did an amazing job planning for their visit. Both had connected their lessons to prior learning. This was nice to see because usually in a classroom observation visit (that is not a lab visit) teachers are putting on a show for their visitors. Here I could tell that they have been working hard with the students to establish certain strategies and skills. I am especially impressed with both of them. They helped to make the day great!

The professional relationships and intentions that the teachers brought with them at the beginning of the year also contributed to creating a culture/environment of belonging that allowed the teachers to feel safe enough to take risks (i.e., be vulnerable) in order to extend their daily instructional practices. This feeling of intellectual safety and the ability to be vulnerable in the cohort enhanced their ability to give and receive feedback. Although the teachers spoke

highly about feedback, another theme appearing later in this chapter, I highlight it here because their sense of belonging was so strong that it created a culture which enabled them to provide rich and critical feedback to one another in order to hone their practice. For example, Amelia, who was new to the profession and to the school that year, shared the following in her Semester 1 reflection, "As a teacher in lab I feel that I'm in a safe learning place to do so, especially with a group of people who are willing to give me constructive feedback to help guide me to answer those questions." This feeling of belonging that Amelia felt showed up during our meetings when I observed her always furiously taking notes on the feedback that she received after her observational visits. She would often express her appreciation for this in her file folders at the end of each visit. For example, in one of her reflections (Q1) she expressed that receiving feedback from her "lab sisters" (a term that Amelia often used when writing about her cohort) allowed her to "get a clearer lens of focus and purpose for working with her group." Having this clearer sense of purpose helped her to feel more confident in the work that she was doing.

Sophia, a more seasoned teacher, provided a similar example from her own personal experience regarding the feedback process in her one-to-one interview:

> You're receptive to the actual feedback because you get so much supportive feedback in the beginning. You know, and so you're like, "Oh, I feel good about all these other things; so yeah, okay, I can admit that there were some things that didn't go so great." You don't feel that level of defensiveness that you might in other models. (Sophia, interview, May 14, 2018)

Amelia concurred with Sophia in feeling safe to receive feedback from her cohort when she mentioned the following in her interview: "We are in such a community in our cohort . . . where it doesn't feel like I'm being attacked" (Amelia, interview, May 24, 2018).

In these two data exemplars, it is evident that receiving supportive feedback within a community of teachers was not always the norm. The fact that the teachers felt a sense of belonging because of the professional relationships that they were able to build allowed them to feel safe enough to take risks in asking questions and for giving and receiving feedback that aided in extending their own literacy learning.

Multiple perspectives extending learning. Another experience that the teachers spoke about was the ability to come together as a cohort with other teachers from varying grade levels and years of experience. Many teachers found this opportunity appealing about the HLC because it opened up the learning opportunity to all teachers, providing multiple perspectives to facilitate their learning. As a new teacher, Amelia stated that she joined the cohort because she knew that she could benefit from learning from other teachers. She said:

> As a new teacher I could definitely benefit from being in a group of teachers . . . because it was advertised as it could be anybody, you know, new teachers, could be like librarians. . . . I thought being a new teacher helped. It would help me meet other people that I work with at the school. And I really like that. (Amelia, interview, April 24, 2018)

In Claire's one-to-one interview, she stated, "It was kind of refreshing to have different perspectives. And I also appreciated having the perspective of a librarian."

According to Sophia the opportunity for multiple perspectives would not likely have had occurred had they taught in the same content area or grade level. She said:

> We were all working at different grade levels, and so, you know, if at a certain grade level that you might want to be more lockstep in terms of how you actually—like the assignments you give and the practices you do. (Sophia, interview, May 14, 2019)

For most of the teachers, the opportunity to collaborate in a school-level cohort with their peers was appealing and provided initial motivation for joining the HLC; however, the diversity in grade-level positions under the same common focus provided the benefit of multiple perspectives to extend their thinking about their common instructional goal. All of the HLC members acknowledged this was different from past learning experiences, and the many benefits of a variety of perspectives were apparent to each of them. Other examples of this in the data come from the transcripts of our observational visit debrief sessions where at the end of each session (after giving feedback to the observed teacher) the other members went around the table and shared what their "take-away" back to their classroom was from the observation. Since they all came from different grade levels or roles with varying years of experience, they all brought with them different lenses to their learning. However, since they were all learning under the same umbrella focus, these multiple perspectives added to everyone's experience of the visits.

Some examples of this can be seen during our second observational visit debrief with Amelia, a first-year teacher, which included teachers' comments:

- Sophia reflected, "I really like the flash card warm up. This [visit] really helped me to see it in action, because I am trying to incorporate other activities into the library for the little kids."
- Elizabeth also found observing Amelia in the classroom beneficial, even though it was not the same grade level as hers, because it gave her ideas for students who were still developing in their phonological awareness. She shared, "I have students who still have trouble with their short and long vowels. So, I really liked your warm up. I think it is something that I would like to try."

- Zoey reflected on Amelia's delivery of the strategy lesson and how they wanted to try some of the strategies she used into their own lessons. Zoey commented, "Watching the lesson today reminded me that that I need to keep my mini-lessons mini. I talk too much!" She went on to add that having a photocopied text that the students are reading when conducting a formative assessment, like a running record, would really help her keep track of what they are saying. "It's like I have seen it done like that before, but watching you today use it like that really helped to remind me."
- Claire, who was also a teacher that was observed on that day, shared with Amelia that her takeaway for the day was needing to spend more time listening to her students read. "I think that I need to be better about making sure that I am hearing each one read on a regular basis. I also think your specific positive praise was awesome. It is a good reminder."

I use these comments from the debrief transcripts to show that although Amelia was a new teacher who taught kindergarten, she had a lot to offer to the other teachers because they shared a common goal for their learning. The multiple perspectives that the teachers brought with them was seen as a benefit to all and not a hinderance to their learning, which add to their sense of belonging.

Cohort members and facilitator as resources. Teachers also mentioned several times in different data sources that they considered one another and me, the facilitator and author of this study, as valuable resources for their literacy learning and their ability to apply it to impact their students' learning. Teachers often expressed appreciation for the support they received in terms of resources, feedback, and time (guidance, modeling) from one another. This was evident in the

comments they made in their Semester 1 reflections in response to the question: *What supports would they need in Semester 2 to enhance their literacy learning?*

For example, Sophia wanted more feedback from her peers and guidance from the facilitator. She stated, "Being observed and getting feedback would be helpful. I'd also be open to co-planning a lesson and observing you [author of the study] teaching that lesson."

Elizabeth also cited feedback from her peers and from the facilitator would help to strengthen her implementation of practice. She pointed to the following requests:

> I think the resources and supports that will be helpful in supporting my growth in this area will be continuing to read our anchor text, getting lab teacher feedback and lab facilitator feedback, searching for and watching more modeling of explicit teaching so I can better my timing and pace and be sure my lessons are not too lengthy. (Elizabeth, Semester 1 reflection, May 14, 2018)

In Amelia's Semester 1 reflection she found having a facilitator to bounce ideas off of and provide her specific resources that aligned with her teacher goals helped to move her practice forward. She stated, "Having a knowledgeable advisor and being able to talk to someone like Esmeralda [facilitator], who's a guru at ELA assessment and strategies, has helped to guide me into the right direction toward helping my students with reading."

Zoey also echoed this statement in her one-to-one interview when reflecting on her own learning, stating, "A lot of it was the support from you [facilitator]. . . like when you sent us articles that are related to our specific goals, that even extended my learning. I mean, I really started reading [Tim] Rasinski."

Amelia and Zoey viewed the materials and resources provided as valuable resources for in extending their practice; however, they also commented that having a content specialist to

provide them with one-to-one coaching and modeling of the practice really deepened their understanding of it. For example, Amelia expressed her appreciation for observing the facilitator model a lesson aligned to her quarterly goal that transferred into her own classroom practice in her Semester 1 reflection:

> It was wonderful being able to observe her [facilitator] because after the observation we realized that a great deal of my students struggled with vowel sounds. She then taught them an engaging quick way to practice the alphabet sounds, which now we have put into our morning routine before Language Arts.

Zoey appreciated the one-to-one coaching that she received from the facilitator in analyzing her data to guide her instruction. She stated in her Semester 1 reflection that working with the facilitator to analyze her students' data helped her to gain knowledge about her students:

> I was able to sit down with Esmeralda and see what my students were using and not using from their running records and form a strategy lesson that was observed by my lab colleagues. [Having the resource of the facilitator] strengthen[ed] my content knowledge so that I could lead successful small groups. . . . Watching my colleagues and Esmeralda teach strategy lessons has helped me gain confidence as well.

This recognition and appreciation for their cohort members and facilitator as resources was also seen throughout the year in their file folder reflections. For example, Elizabeth excitedly expressed after her first observational visit, 11/09/17, to her classroom what a "Great day!" it was and how "very fortunate" she felt to be "collaborating with an amazing/knowledgeable group of women…I always leave with new ideas" Sophia shared in her file folder entry on 03/01/18 how "It was great seeing Elizabeth, Claire, and you (Es) teach

today! I liked how the lessons weren't perfect, because it made it feel more real and more of a valuable learning experience."

Every member of the cohort showed appreciation for working with a content specialist (facilitator) as a resource. Elizabeth shared 01/11/18, "I appreciated watching you teach today and learning from you. I had several "take aways" from today's lesson." Another entry from Elizabeth on 03/01/18 stated,

> Thank you for working with me on my lesson. I enjoyed planning and working with you. You are so knowledgeable…I value the feedback you and my lab sisters provide me and appreciate you pushing me to the next level. Thank you for all your help, time and dedication to our group.

Zoey wrote on 01/11/18 that she also appreciated the ability to plan with a content specialist. "Thank you for coming and planning a day of learning to start off our new year! I am excited to start working on my new goal."

On 03/01/18 Claire highlighted the utility of the facilitator's presence in bolstering a lesson at a time she felt unprepared,

> Thank you for coming to my classroom today and showing me how to use the assessment with the students. I feel like I was unprepared for today, but I appreciate you being patient with me! The knowledge and skills I have gained from you and my other lab teachers have been so beneficial to my teaching practices and my students.

Amelia shared on 03/12/18 how she loved being able to collaborate because of the ideas that she gets to bring back to her own classroom. "I saw the value of sharing ideas and goals for the same lesson…watching someone else teach the same lesson helped to give me ideas for what I can do to improve."

To close this theme, all of the teachers attributed their sense of belonging to the voluntary aspect of coming to learn with other teachers around a common goal. This voluntary aspect brought together like-minded teachers who came in with the intention of collaborating and supporting one another through the HLC process. The multiple perspectives that they brought to the cohort were viewed by the members as resources to help them achieve not only the common goal of the group, but their individual goals as well. And because they were building common knowledge together, they were able to relate to one another more deeply, which contributed to their professional relationships and the positive culture of the cohort.

Application

I arrived at the second theme when the word *application* arose multiple times with reference to teachers' learning during the data reviewing process of various methods. Teachers often stated that they were able to internalize their learning (i.e., transferred it to their own practice) as a result of the ongoing application of their learning with other teachers in the cohort. Just as I determined with the first theme of sense of belonging, there are nuances within application that became distinct. These sub-themes include: (a) resonated with teachers' beliefs about learning, (b) provided a systematic approach, (c) fostered peer accountability, (d) supported by shared resource/anchor text. This is a complex theme that is loaded with many (philosophical) terms, because I was unable to separate the teachers' beliefs from their experiences of their application.

Resonated with teachers' beliefs about learning. At the year-end interview several teachers spoke of the opportunities for active engagement with their peers that aligned with their

beliefs about what constituted effective PD for teachers. For example, Amelia stated that effective teacher PD:

> is something that I can apply in the classroom, and it's not just one and done. . . I definitely felt that . . . our lab cohort . . . helped me become a better teacher because now it's pulled into my everyday practice pretty much or at least weekly practice.

Claire concurred:

> I think that they (i.e., PD) just need to be like applicable. . . . That is how it sticks, though. . . . When you learn it—and I got this out of the lab cohort—we would talk, we would meet about something. The next day I would come, and I'd try it or I would read something in the book and I would try it . . . like within that same week. And it sticks.

Elizabeth attributed the ability of teachers to gain knowledge that they could immediately apply to their classrooms as a critical component of effective teacher PD. She stated:

> You can gain the knowledge and then take it back and apply it to your practice. And it's ongoing . . . . You can apply it and reflect on it and then continue to work on that scale instead of just a one-and-done type of situation.

And in Sophia's interview she added the importance of teacher PD being authentic and long-lasting. She said:

> I've always liked PD that are practical. I want things that can be applied in the classroom right away, but that aren't necessarily quick fixes and it's hard to get those two together, because you do want something that's applicable. You can apply it right away but you also want it to be meaningful and deep and sometimes those two are hard to join in together.

These comments from the teachers suggest that they valued learning by doing in pragmatic ways (i.e., connecting to their current practice). The teachers expressed the importance of PDs being designed in a way that allows participants to take the knowledge gained and immediately apply it in their classrooms. This connection of new learning to their current practice made the difference in their depth of understanding of the practice and the quality of their instructional practice. This emphasizes the importance of PDs providing practical and clearly applicable lessons for their participants.

Provided a systematic approach. According to the teachers in this study, the cyclical nature of the HLC (containing four components, a learning cycle happening once per quarter) had a significant impact on their professional learning experiences because it provided opportunities to *plan, apply, reflect,* and *extend* their teaching and their students' learning in a way that a one- to two-day workshop cannot provide.

The data suggested that the teachers found the overall design of the HLC supported their professional learning because it followed an ongoing, systematic, and cyclical process that was anchored in their current teaching practice. For example, Claire remarked that the systematic nature of the HLC model was "applicable" and connected to her classroom practice, which ultimately had the most impact on her learning and that of her students. She stated in her one-to-one interview, "Honestly, . . . [it was] one of the best PDs I have ever done because I got so much out of it. It was truly applicable. It was that I could take it and apply it right away." When Amelia was asked what aspect of the model she thought had the most impact on her learning she replied, "The whole model. . . . It helped me to be more purposeful in my teaching." When prompted to explain further what made her more purposeful in her teaching, she said that

creating teacher goals and using the components of the HLC learning cycle multiple times throughout the year really helped sharpen her understanding of her content. She stated:

> Like [I needed to know] why am I teaching something and what is my goal for the lesson. . . . I think that . . . being very intentional with your instruction and being very clear about what you want is also very important. (Amelia, interview, April 24, 2018)

The teachers' quarterly goals were instrumental in helping the teachers to become more intentional in their practice to implement the instructional strategy that aligned to their cohort's focus. For Elizabeth, setting her own quarterly teacher goals helped to extend the level of teaching already occurring in the classroom. In fact, she explained that it allowed her to take more ownership in crafting her literacy lessons than being dependent on the school curriculum.

> I also had to kind of take a step back from Wonders [basal] and work more on the strategies of reading and not just a different textbook Wonders each week. [My teacher goal] helped me focus on a certain standard within the reading strategies and pull it in that way so that they can make that connection. (Elizabeth, interview, May 14, 2018)

She continued to talk about how having a goal every quarter helped her to build on her past learning and address her students' current needs. "So, I started the year with focusing on fluency and then I move to more of the comprehension aspect of it. I feel like that's where my kids needed to go, because they had increased with their fluency…so it was the next step in the progression of their learning needs."

In Zoey's interview, she attributed her students' ability to set their own fluency goals towards the end of the school year to her creating and reflecting on her own teacher goals. She said, "It is sort of backwards thinking. OK, where do I want them to be? How am I going to start? What does the research say? … Then we went read with the research…and then we were

doing it…it just helps you map it out. It's just thoughtful teaching" (May 29, 2018). And because of the time Zoey took to create, research, and apply her goal, she was able to make instructional decisions that targeted the areas of strengths and needs of the students she was working with, rather than focusing on simply implementing practices (e.g., small group instruction).

When reflecting on the goal setting process, Zoey felt that having to read the research that aligned with what she wanted to accomplish with her students significantly impacted her literacy learning. "My goals impacted my literacy learning because when I set the goals, I had to find the research… read the research…[reflect on]….how to how am I going to get these my learners to achieve this goal? So, I had huge growth in learning about teaching reading in small groups. I began teaching strategies as opposed to just leveled the reading group."

Goal setting was not the only activity within the HLC learning cycle that the teachers felt impacted their learning process. It was the application of the goal (i.e., "Apply" component) which involved the instructional focus of the cohort or seeing it applied in the classroom that teachers referenced as being instrumental in supporting their professional learning. Sophia stated the following in her interview:

> The process of implementing it [strategy] helps you to understand it more deeply. . . . You can understand it on an intellectual level, but until you actually put it into practice, you can't really only have a certain level of understanding of it. (May 14, 2018)

Elizabeth indicated in her file folder reflection after participating in the first professional learning cycle that it was "unlike anything that she had ever done in her teaching career." She went on to share in her file folder reflection:

> I have has so many observations, but none with the extent to what was provided today…the meaningful feedback…being able to use my data to choose a strategy for

> students that had a true need for the skill…the book talk, sharing ideas and resources gave me several things to think about and apply in my classroom. (Elizabeth, file folder, September 14, 2017)

Although there were many activities that the teachers engaged in to *apply* their learning (e.g., goal setting, observational visits, interim meetings, book talk, artifact sharing), the one activity that teachers referenced across multiple data in having a significant impact on their literacy learning was their participation in the observational visits (either as the observer or the one being observed). Having opportunities for observational visits in which the teachers observed and provided feedback to one another resonated with them since it gave them models and exemplars (Darling-Hammond, Hyler, Gardner, 2017) of the instructional practice they were trying to implement in their own classroom. For Sophia, participating in observational visits helped to motivate her to be successful in her own learning. She stated in her interview, "I love seeing my colleagues teach and being inspired by their teacher moves." This also resonated with Amelia who noted that the support she gained from participating in the observational visits gave her ideas to use with her own students. She said:

> When I observed other teachers teach, and I saw what they used to assess, it kind of inspired me. . . . I should do this in my own practice as well. And, you know, I got to try it out, and I got to figure out and see assessments like reading records worked best with my kids. (Amelia, interview, April 24, 2018)

For Zoey, the observational visits were one of her "favorite parts" of the HLC model. She expressed in her interview:

> I love to go and watch other teachers and see what they're doing in their classrooms… how the students respond to the teachers trying out the research-based strategy lessons on

them and the stuff that they were learning in class. You take away so much from those visits from your colleagues more than you can at another type of PD.

When prompted to explain more in regard to the observational visits, Zoey went on to state:

> Well you're seeing your colleagues in action. What they're doing. I think just physically being there and watching it, I remember it …as opposed to if you're reading a scenario in a book. I am a visual learner. So, for me, I think, maybe that's why it's so important to me. Like I can watch people do things and I remember it. But if I read it and don't do it…I don't remember it quite as much. (May, 29, 2018)

Seeing her colleagues in action was also an important attribute to Claire from the very beginning of her joining the HLC. For example, in her pre-reflection questionnaire she wrote, "I believe that the best way for teachers to continue learning is through hands on experiences with their students." While Claire knew the benefits of teacher-student interaction, Claire discovered the enormous value of both observing her fellow teachers and being observed. She stated:

> And it was also cool to see the other teachers and see how they would implement the strategies during the observation. Even though it was not specially a part of my goal, I was still able to take from what they did and apply things in my own classroom. (May 22, 2018)

Elizabeth said that in order to meet her quarterly teacher goals, she had to apply her learning to her classroom practice and reflect with others on the impact of her teaching, which in turned fostered her learning of the strategy and extended her ability for future application. Elizabeth stated in her interview:

> To have other people seeing and observing [me]…making notes…and being able to tell you what's going on....Then the feedback that they provide you on how you can extend

> something or change it or make it better. And you know it might be an idea that I never thought of and you know are.... Finding out what might work better…was really helpful. (April 21, 2018).

It was evident that for all of the teachers, these ongoing opportunities to observe and be observed contributed greatly to inspiring them to understand and apply the strategy more deeply, in order to internalize it to enhance their classroom practice.

However, reflecting together on the application of their learning also contributed to new learning for many teachers in the cohort. For many teachers, growth in their content area knowledge and pedagogy was one of the primary drivers of their initial participation in HLC, but when given the opportunity to reflect on their overall learning over the course of the year, the outcome levels of their learning were unexpected for most of them. Amelia said the following in her interview:

> It exceeded my expectations! . . . It gave me a lot of things to take away that I definitely can use for next year and the years [to come]. And I think that, you know, if it wasn't for a lab cohort, I don't think I would have been doing half the stuff that I'm doing now for language arts. (Amelia, interview, April 24, 2018)

In her interview Sophia reflected and described her literacy learning in three parts. She said:

> I have learned new things in literacy definitely through our conversations and seeing the work that other people did. . . . Reading the anchor text has improved my understanding of literacy and reading, . . . and then the pedagogy, too. . . . I learned strategies that I wouldn't have tried otherwise. . . . The motions—the physical motions—paired with . . . a very simple statement of the steps of a strategy: . . . That's not something that I would

have done before, but I felt . . . it was useful. . . . I wouldn't have thought of that on my own. (Sophia, interview, May 14, 2018)

The data confirmed that the teachers' participation in the HLC learning cycle played a major role in their overall learning experience. This resulted in the teachers' placing ongoing attention to their goals and honing their practice through classroom visitations, professional readings and discussion, as well as feedback and reflection time with their peers, which many teachers believed impacted their literacy growth overall.

Peer accountability. Along with what the teachers were saying about application, the teachers spoke of feeling accountable to the members of their cohort as a strong influence (motivator) on the application of their learning. Several stated that this level of accountability differed from their past participation in other learning communities for a number of reasons due to its quarterly goals, observational visits, and participation in multiple learning cycles. For example, Claire brought up the expression "accountability and application" many times during her interview. At first, she spoke about her past experiences attending one- to two-day workshops. She explained, "Well, there is no follow-up. . . . You are just done! So you are like, 'Great! Fine. I went. I got credits.'" When she reflected on her experience with the HLC model for professional learning, she stated:

> I knew I had to keep working. . . . I was accountable to my group. It was not so much that I was thinking, Es [facilitator] will be so mad at me . . . [laughter] but [that] we had made those agreements. . . . I always felt guilty if I didn't show up with something. . . . I am letting myself down. . . . I am OK, in that aspect, but it was letting others down. I think that if it was just me and if I set out on this quest to do this on my own and there [were]

no meeting with others or having to bring things, . . . I 100% know that I would not have followed through on it.

There were so many other things that needed to be done this year, too, that I would have gone, . . . "Well, that can go! My professional learning can go because I have to focus on the kids." So, I think having—knowing that I did not want to let my peers down—no matter what they were going through, too, everyone else was going to show up with something. So, it was really important. (Claire, interview, May 22, 2018)

In Sophia's interview she discussed how the HLC model of actually having to go into her classroom and apply what she had learned or read about with her peers was critical to her internalizing it. Doing so also held her more accountable to her own learning in the cohort. She said:

I could sit in a class and sort of talk about, you know, about instruction and pedagogy and literacy all day long and write papers about it and write . . . a sample lesson plan. But then when you actually go into the classroom and you have to make it work, you either know it or [it] doesn't work the way that you imagine it.

Well, you know, and so kind of putting those two pieces together of the book study and then actually applying what you're knowing and having to be accountable. . . . It's also a higher level of understanding those concepts, right? I mean, you can sort of talk about them, but until you can actually perform them effectively, . . . that's when you know you really understand that material, . . .when you're able to perform those actions and implement what she's talking about, that is when you really have gotten it. (Sophia, interview, May 14, 2018)

I discovered evidence of Sophia's experience of this in looking at some artifact data, where Sophia shared after her first observational visit, "I'm glad I finally got to do my demo lesson…because I was finally able to see how my teaching has changed from the beginning of the year." Many of the teachers shared with me at various points throughout the year that because the cohort was a small group of six people (i.e., five teachers and one facilitator), they had no one to hide behind as in a larger staff meeting. They actually had to demonstrate their learning to their peers as well as share with them the process they used together on an ongoing basis. Doing so fueled their motivation to engage and apply their learning throughout the year.

Size of group impacted accountability and depth of learning. Many teachers linked the sense of accountability with the small size of the group. In her interview Sophia initially attributed this feeling of accountability to the cohort to the spotlight focused on each member because of the small size of the cohort. She said, "Yeah, there's more accountability or, you know, the spotlight. It's a little bit stronger if it's a small group."

Like Sophia, Claire agreed during her interview that the size of the group created a level of accountability in the cohort to perform and apply her learning at a higher level of rigor:

> There is definitely accountability in the lab because if you are not doing something, you have nothing to bring to show evidence of it; and if you are not doing it, you have nothing to observe in your classroom. . . . I need that accountability factor. . . . I think that helped me [to think], "Somebody is going to be looking at this. Somebody is going to be making sure that we are doing this."

Claire also emphasized that this feeling of accountability also brought with it the benefit of teachers digging deeper into their learning because they were such a small group. She added:

> I feel like we were able to dig deeper all year because it was a smaller group, because we were all able to see from start to end . . . what we were—each of us were—doing, how we interpreted the book, how we were applying the book. Yes, it was just five of us. . . . We made our little impact vs. a whole school trying something; . . . we were able to dig deeper. (Claire, interview, May 22, 2018)

Zoey also agreed with Claire's thoughts of being able to dig deeper into learning because of the small size of the cohort. She compared her involvement with the HLC to past participation in other school learning communities. Regarding the book study, she said:

> There is more accountability in ours. You sort of really had to read it. In my previous school we would do a book study. The whole faculty would get one book, and then you would kind of get your assignments every once in a while. You'd have to come together and do something on it. But because it was the whole school and the meetings for the whole school, . . . I think you can kind of get by with like maybe skimming it or, you know, doing something just to kind of have something to show. (Zoey, interview, May 29, 2018)

Zoey did not necessarily view this type of accountability to apply her learning in a negative light. In fact, she said she thrived on it because it motivated her to do the learning in the first place. In her interview she said, "I love accountability! That's why I like to go to the gym. It's the same thing." She added that most teachers would never participate in this level of learning if they were not a part of a cohort like the HLC:

> I think most of us would never do this work and this learning if we weren't part of a group. It's the accountability again and just being part of the group, I guess. I mean, you could call it accountability. (Zoey, interview, May 29, 2018)

In general, the small size of the group, along with the built-in opportunities for implementing, sharing and learning with and from peers, contributed to their motivation to apply their learning in their classrooms. Many of the teachers began to form personal relationships where they met up outside of school to work and play together. In addition, the size of the group also contributed to the teachers' feeling that they could achieve their goal. A few of the teachers shared that they felt the small size made it more manageable to attain their learning goals, because there were only a few people to consider vs. the whole school.

Supported by shared resources/anchor text. When examining the data, I also noted how the resources that the teachers had access to, shared, and created with one another heavily influenced their experience in the HLC, their own literacy learning, and their students' learning. However, the one resource that all the teachers cited multiple times in the data (interviews, semester 1 reflection, observational visits/interim meeting discussions) was the anchor texts (i.e., the book that the teachers chose to use to read and discuss that aligned to the instructional strategy they were implementing as a cohort). Although the use of an anchor text was a part of the Extend component of the HLC learning cycle, the teachers felt it was the cornerstone of the cohort and essential to their learning process (or in supporting the entire HLC learning cycle). For example, Amelia attributed much of her own content learning growth to reading and discussing the anchor text. She said:

> I definitely see that there has been growth in my content knowledge, pedagogy, and confidence with teaching small group. My content knowledge and pedagogy has expanded with reading our anchor texts because it gave me strategies to use for various levels, genres or text types, and the skills you want to work on. The anchor texts also gave me a better understanding of my students as readers and the importance of having

> small reading groups. I greatly feel that I have a better understanding of my students' cognitive development as well and the importance of my students having engagement with texts they read. (Amelia, interview, April 24, 2018)

Sophia also stated in her one-to-one interview that the anchor texts supported her literacy learning process because it was a resource that she could use in and outside of HLC time. She said, "The anchor text is really important because . . . I could go back and reread it and reread it." She explained: "I like the pairing of *The Reading Strategies Book* with *Teaching Reading in Small Groups* because they complemented each other and provide both the what to teach as well as the why and the how to teach" (May 14, 2018).

And Claire spoke in her one-to-one interview about how the "novel study" (anchor text reading) and "talking with everyone" supported her own literacy learning as well as how the anchor text served as a valuable resource in supporting her implementation of the cohort's instructional strategy. She said, "The engagement chapter was easy to understand, which helped to implement the ideas."

Even Zoey, a teacher with over 20 years of experience, stated that reading and discussing the anchor text helped to provide her with new perspectives on reading groups. She said:

> Yeah, the *Teaching Reading in Small Groups* by Jennifer Serravallo really helped me see a whole new perspective on reading groups. I've always done level reading groups for the most part where I do strategies, too, teach them strategies; but this one really helped me to think about, you know, analyzing the data first. . . . It really helped take all that research, you know, which is like the meat, but then to be able to apply that research to reading strategies really helped. (Zoey, interview, May 29, 2018)

Data showed that the anchor texts were perceived by the teachers as resources that not only brought their learning together but also provided them with tools in and outside the cohort to foster their application of the learning. The teachers in this study also stated that the anchor texts helped to build common language for its members and to make the interactions among the members richer because it facilitated common understanding that supported their professional discussions and observational visits.

When asked to reflect on what part of the HLC model helped her to apply her learning to impact her students' learning, Elizabeth cited the anchor text. She said:

> Well, I feel like it started with the anchor text. . . . You can see what the research says and how to then apply that research. . . . I feel like the way that we broke it down and were able to discuss it and then take that and apply it was really beneficial. (Elizabeth, interview, May 14, 2018)

Zoey echoed Elizabeth's comments in her one-to-one interview by providing examples of how the anchor text supported her learning process: "Having the book talks and the book discussions and actually reading a whole book on the latest research together . . . gave me a lot of useful strategies and amazing anchor chart examples." Zoey became very passionate when she reflected on how the anchor text helped to provide the cohort with common language and understanding for collaboration. She believed this was important for teachers learning together at a school. She stated:

> We can all say, "Oh, I'm doing strategy lessons." You know, I probably meet teachers from other schools and they're like, "Yeah, I do strategy lessons." But . . . we don't all have a common understanding what a strategy lesson is or whose model it is. . . . So from this anchor text you know she had created her own strategy lesson model. . . . We all

understood what we were talking about. . . . It just created common knowledge around the content. (Zoey, interview, May 29, 2018)

The importance of the anchor also showed up in other pieces of data, such as their Semester 1 reflections. For example, Elizabeth cited the "anchor text" as one of the factors in helping her be successful for the first semester. Similarly, Amelia felt that the anchor text helped her "content knowledge and pedagogy expand." She explained, "because it gave me strategies to use for various levels, genres/text types, and the skills you want to work on. The anchor texts also gave me a better understanding of my students as readers and the importance of having small reading groups."

In our observational debrief transcripts the teachers often referenced their anchor texts when providing one another feedback on their practice. For example, during our third observational visit, Sophia referenced the anchor text when giving Zoey feedback on her strategy lesson. "I saw all of the elements of the 'strategy lesson'….but two parts that stuck out in my mind was at the beginning of your lesson…I think one thing she (author) talked about in the book is being super clear and specific about the actual strategy in the beginning of the lesson." During the same debrief, Amelia referenced the anchor text when giving feedback to Zoey around the timing of the lesson. Amelia added, "I really liked how the lesson went full circle…with stating the purpose and strategy in the beginning and at the end…that is what we read about in the last chapter…but she (author) also talked about keeping the lesson short…your lesson was 25 minutes…and I think she (author) recommended 15."

As reflected in the data, the anchor text was perceived by most of the teachers as a critical component in their professional learning process because it gave them a tool to use to build

common content knowledge and language (terminology) to support their professional discussions when working with one another.

This theme of application aligned with most of their beliefs about effective teacher PD in that they brought to their participation in the first place. The teachers also noted that the ongoing systematic design of the HLC professional learning cycle was critical in deepening their own learning because it gave them multiple opportunities to plan, apply, reflect on their practice, in order to extend it. And that having shared resources, liked the anchor text, gave them tools to apply their learning and give feedback to one another. And the teachers' own internal accountability to their cohort members firmly supported their commitment to the application of their learning.

Feedback

> I am glad that I was a 'risk-taker' today and did my observational lesson! It was so nice to hear everyone's feedback. I am excited to apply the AF [actionable feedback]. This cohort has helped me grow so much as a reading interventionist. I am so proud of how far my students have come in just the 1st quarter! (Claire, file folder entry, November 9, 2017)

This quotation from Claire serves as an appropriate opening to this section because Claire found the feedback that she received from her cohort valuable in extending the growth of her students, so much so that she seemed pleased with her decision to take risks to participate in the observational visit.

Feedback was a recurring theme that resulted in the data analysis of multiple pieces of data and crossed-over many themes and subthemes, such as sense of belonging and

accountability to the cohort. In this section I seek to elaborate on the types of feedback, which were a factor in contributing to the teachers' overall experience of the HLC.

The intention of feedback in education is almost always to support the improvement of teaching and learning occurring in the classroom. The teachers shared that the feedback they were most accustomed to receiving tended to be more evaluative (i.e., based on Danielson criteria for their yearly evaluations), sometimes perceived as negative, and almost always originating from an administrator. However, the teachers who participated in this study described the feedback that they experienced in the HLC as "supportive," "authentic," and "useful" to extending their practice. What was particularly important for them was that the feedback they received was "immediate," indicating to them not only what they could improve upon but also highlighted what they were already doing well so that they could do more of it. They regarded the feedback they received from their cohort as "actionable," that is, geared to helping them meet their teacher goals. The feedback often came with examples and resources to implement it. Although feedback is one of the elements of the HLC framework, many teachers believed that the ongoing, supportive, immediate, actionable nature of the feedback contributed to their overall experience of the cohort and influenced their own literacy learning growth. The four subthemes that follow emerged from examining the teacher's description of feedback: (a) opportunities for supportive feedback, (b) immediate, timely, ongoing feedback, (c) actionable and focused feedback, (d) feedback from peer-practitioners.

Opportunities for supportive feedback. The teachers in the study spoke in depth about how built-in opportunities for ongoing feedback such as the quarterly observational debriefs allowed them to participate in positive professional dialogue and obtain feedback from their peers which supported their professional relationships. For example, Sophia noted "feeling

good" about the feedback that she received; she was actually able to hear its supportive nature. During her year-end interview, she stated:

> You're receptive to the actual feedback because you get so much supportive feedback in the beginning, you know. And so you're like, "Oh, I feel good about all these other things. OK, so yeah, I can admit that there were some things that go great." You don't feel that level of defensiveness that you might in other models. (Sophia, interview, May 14, 2018)

She also explained how the supportive nature of the feedback transferred to her experience with being observed and the vulnerability that comes with it. This was important to Sophia because she was often the most skeptical member in the cohort, doubting the impact her participation would have on her role as a librarian. She stated:

> When being observed, you want to do a good job. . . . You try to make it a good lesson. You put everything you have into it and try things out to get the feedback. . . . Having the group [be] so super supportive and knowing how challenging it is, you are open to the feedback because you get such support. (Sophia, interview, May 14, 2018)

She indicated that the feedback she received was worth the effort, showing the value she placed on it supporting her practice.

Elizabeth concurred during her one-to-one interview that vulnerability in taking risks in her instruction to extend her practice was worth it because she, too, felt supported by the feedback she received from her cohort. She said:

> They [the observational visits and debriefs] were very supportive. . . . We were able to get that authentic actual feedback and hear what everyone else is seeing. . . . Then that

> feedback that they provided was how you can extend something or change it or make it better. (Elizabeth, interview, May 14, 2018)

Although many of the teachers spoke of the support they felt as a result of the feedback, nearly all appreciated the actual structure of the observational debriefs (i.e., observers provided the observed teacher with wows, wonderings, and actionable feedback on their areas of focus). She also noted the value of this type of feedback in extending her classroom practice:

> I was able to take everything that was said and noted on the paper. And I could then go back, and the next time I did it try something different or apply the suggestions. And you know, if it was a wow, then continue with the wow or, you know, if it was . . . a wondering and, you know, make the corrections on those wonderings. (Elizabeth, interview, May 14, 2018)

Zoey also recognized the debrief structure after the observational visits (i.e., observers provided the observed teacher with wows (what stood out as exemplary), wonderings, (questions for clarification) and actionable feedback (goal-oriented and aligned to their areas of focus) for the support it supplied by pointing out the following:

> There's a different feeling to the kind of debriefing and feedback loop. It's more—it feels more supportive and more wanting to push you and grow you and your practice. And really wanting you to be successful from your colleagues.

This feeling of positive support from their peers contributed to the quality feedback teachers were able to give and receive to each other in the cohort. Amelia affirmed in her interview how the positive nature of the feedback and the feeling of community supported her in extending her literacy practice. She explained:

> We are in such a community in our cohort . . . where it doesn't feel like I'm being attacked. . . . But [in the cohort] they say, "Here's a suggestion. Maybe you can try it next time. You don't have to." . . . But you know, it's just having that option. . . . It is a dialogue. (April 24, 2018)

For Amelia, this sense of belonging contributed to her ability to engage in dialogue with her peers in a positive way remained central when she described the feedback process in the HLC cohort. While I tease out this exemplar for this sub-theme, I think supportive feedback and sense of belonging connect. She added:

> Well, I feel like our lab model. . . [is] honestly . . . like family, you know, because we are able to talk and get close to one another and . . . bounce off ideas. And it's not a place for criticism: It's a place for growth. (Amelia, interview, April 24, 2018)

In reviewing the transcript from our observational debriefs, I noticed that the language the teachers chose to use to provide feedback to one another was also very supportive. This type of supportive language which contributed to cultivating supportive relationships (which I can confirm) was first modeled by me as the facilitator. For example, in my transcripts you can hear me saying (observational visit, November 09, 2017- 1:30 PM)

Es (to Claire): "So, a wow for me that I highlighted was your use of pictures on your anchor charts. I really liked how you connected the vocabulary words to real life examples. I think it really supported your students in remembering them in the activity. That was so awesome!"

Es: (to Amelia): "I loved your use of pictures and they were all so nicely done…the anchor charts you had displayed helped your students remember what to do (during

transition)…and the fact that you gave them specific feedback to each one…you can tell your kids like you and you showed them today that you liked them too."

During our third observational visit debrief, I noticed in the transcripts that four of the five teachers opened their feedback with a compliment or positive statement, just as I did. For example, when Amelia provided Claire feedback on her lesson after an observational visit, she typically opened her statements with, "I really liked it when" or "What wowed me was," followed by specific evidence. "I also really liked how they knew the protocol, . . .and I was really impressed that when you gave them exit slips, . . . they knew what to do."

Likewise, the observational debrief transcripts showed that Elizabeth and Zoey also opened their feedback with similar positive statements followed by specific evidence to reinforce and support the teacher's practice. When providing Amelia with feedback on her lesson, Elizabeth used statements like "I thought it was really cool that you kept them focused and on task." Zoey opened her feedback to Claire by noting how she has "created a community of learners" for her students and that she felt it was a "very safe environment" because of the relationships that she has formed with students.

The culture of feedback that was being socially constructed in the cohort allowed teachers to give and receive feedback in order to influence their practice. For example, Amelia had offered Claire a substantial amount of positive feedback initially during the debrief, so when Amelia offered a suggestion to improve her instruction, Claire was open to it. In the debriefing sessions for her second observational visit, Amelia stated, "Do you ever go over their exit slips? . . . Do they get to share them with their classmates? . . . This may help in their understanding of the word better?"

Claire replied,

> I usually look over at them, and then if I have questions on them, I will ask them the next class. . . . Hmmm, I don't think I was watching one of the words: *distinguish.* That's a pretty big word, so I wonder if the other kids knew what it meant?

Amelia's direct question got Claire to reflect on her practice and be more open to At Amelia's suggestion to allow the students to review the exit slips as well. Claire reflected for a moment and responded,

> Yeah, that would be good. They don't usually share the exit slips, but they will share . . . during class time. That one is usually for me, but that would be a good one to have them share there. Thanks!"

This direct feedback was well received by Claire, who was able to adjust her practice quickly because of all of the positive and supportive statements (wows) she received around her practice first.

Sophia, by contrast, did not master beginning with supportive feedback at the start of the debrief process. This was to be expected since they were all working on getting better at being critical friends for one another. But I was still intrigued by Sophia's longer study of the process when working through the expectations. This was especially noticeable during the second observational visit, when she volunteered to be the first to provide Claire with actionable feedback on her lesson. Sophia began her feedback in a monotone, merely stating the facts of her observation to Claire. She said:

> I noticed they were either restating or paraphrasing . . . facts from the text. And so my question was . . . Why were they choosing those particular facts? . . . If it was an aha, what about that fact was important to them or . . . what did they think about that? So maybe the actionable feedback—it would be to—in addition to writing the text

> evidence—because that's really what they're kind of writing down—is their thought about the text evidence. Know why you chose that piece of information. (Sophia, observational debrief, November 9, 2018)

Confirmed in the observational debrief transcripts, as the facilitator, I often found myself having to paraphrase or clarify the feedback she offered for the observed teacher. For example, I prompted her, "So your question, Sophia, on the exit slip was 'Did they define the meaning of the word?' What was the question?" I was concerned that the matter-of-fact style of feedback that Sophia often provided would be seen as a bit jarring and difficult for the observed teachers to receive; this was not the intent of the debrief. I noticed in the observational debrief transcript data, however, that if Sophia was not first to provide feedback, but instead followed after several other cohort members who would model the use of providing positive language stems in their feedback first, she would then often follow by opening her feedback statements with the same positive frames. For example, when Sophia gave Amelia feedback second to last, she delivered it in a positive tone similar to her peers with a positive statement or compliment along with specific evidence. She said:

> The warm up was great because the kids really enjoyed it. So engagement was . . . high. They were smiling and . . . starting with the feeling of success. And it was clearly still a meaningful activity and some of them were still sort of struggling with it, but I think you know it was—they were able to just still also feel like they were able to do it. You know, so they headed into the lesson with . . . I can do that. (Sophia, observational debrief, November 11, 2018)

The positive and specific language that the teachers used when delivering feedback made a difference in their ability to receive it. However, the ongoing, built-in opportunities, such as the

observational debriefs, allowed the teachers to be able to engage in these feedback loops and created an environment where teachers felt safe and supported. This contributed to their ability to give and receive feedback, extending their literacy practices in their classrooms.

Immediate, timely, ongoing feedback. Teachers also referred to their appreciation of the immediate feedback (e.g., debrief after the observational visit, within a week from submitting their quarterly teacher goals); therefore, they were able to apply it to their current instructional practice at the time, which in turn had a stronger impact on their students' learning. Amelia attributed much of her growth as a new teacher to the "tons of feedback" that she received, but what made the most difference for her was that it was timely feedback. Amelia explained, "Yeah, it was a very quick feedback. You know. I'm not waiting weeks. It was just that in there we could debrief with each other [right after] . . . about what worked and what didn't."

Zoey also recognized the impact of timely feedback on her own literacy learning by stating in the Hawaii Lab Cohort Teacher Collaboration HIDOE Video 2018 (see appendix S) interview that:

> one of the greatest things that she liked about it [HLC model] was that the feedback was immediate. . . . It's like you have done this lesson, teachers have observed you, and then we immediately come back together [as a cohort] to get that feedback when it is still fresh and new.

Although immediate feedback was perceived as very important to the teachers' learning process, the ongoing aspect throughout the year seemed to make the most important difference in their day-to-day instructional decisions. Elizabeth spoke about this in her one-to-one interview when asked to reflect on what had the most impact on her day-to-day instructional decisions. She said, "Probably the feedback. . . . The feedback from my peers and the data from my students. . .

. You know, how they were progressing through the goals and how they were learning throughout the process."

This ongoing feedback acted as a support to teachers throughout the HLC learning cycle, which Sophia found particularly helpful especially during the teacher goal-drafting stage. She indicated that receiving feedback when "drafting the goal . . . allowed you to feel good about what was going well or extend what was going well," setting her up for success when she went to implement her goal with her students.

And because many of the teachers stated that their intentions for joining the HLC in their pre-reflection forms was to support and extend the literacy practices occurring in their classrooms, many of them found the immediate and ongoing feedback to be highly influential in their day-to-day instructional decisions.

Actionable with multiple perspectives. When asked what made her literacy instructional practices more purposeful, Amelia pointed to receiving a "ton of feedback" but also cited not only the quantity of the feedback she received but also its quality. As a new teacher, Amelia found that the actionable feedback she received from her cohort helped her to acquire ideas on what steps to take next in her classroom. Amelia explained, "Here's a suggestion [they would say]. Maybe you can try it next time, but you don't have to. But you know it's just having that option. It is a dialogue." She went on to describe how much she appreciated this guidance in helping her accomplish her own teacher goals. She disclosed:

> If I didn't have your support, I would be lost. I would be like, "Oh, . . . I don't know what to do next." But it [feedback] kind of guided me.

Amelia, as a new teacher, found the actionable feedback helpful in guiding her instructional decisions; but more seasoned teachers like Claire and Sophia also looked to it as a

tool to help them accomplish their goals. In their Semester 1 reflections, both Claire and Sophia cited "being observed and getting feedback" from their cohort members as the support they felt they needed the most in reaching their teacher goals the following semester. Claire, however, pointed out what really helped to make the feedback "actionable." She explained the overall difference for her as: "The cohort was made up of teachers from a variety of grade levels and backgrounds, which helped to provide multiple perspectives when they received feedback."

These multiple perspectives helped to give Claire a variety of ideas that she could reflect on in order to improve her literacy practices. During her interview Claire stated that the feedback she received was "all applicable" because of the umbrella focus of the cohort. "We are all working on fluency and comprehension. . . . I just had to bring my level to where my kids are now." The varying grade levels and experience among the members of the group, however, provided the resources and support to apply the feedback. Claire concluded:

> And I loved how our group would be like, "Here's where you go with it next. Have you thought about this?" . . . Sometimes you don't because you get kind of stuck in saying, "These are my kids. This is what we do. This is our routine." So it was kind of refreshing to have different perspectives, and I also appreciated having the perspective of a librarian.

Zoey also spoke to the multiple perspectives the teacher brought to the debrief as "powerful" for extending her literacy practices. She stated:

> The debrief is super powerful. . . . When you're the person on the receiving end, . . . you get to hear other perspectives and see what your colleagues saw . . . and hear about things going on in the classroom that you might not notice and the ways that you can change to better your practice. . . . And you have . . . five sets of eyes. . . . You would never get this

> kind of attention. . . . You know, even if a principal comes to watch you, you don't get the same feedback.

The opportunity for professional discussion immediately after an observation provided the teachers with multiple perspectives to use to take action in their classrooms (e.g., address problems of practice). This really spoke to the importance of teachers needing to receive practical feedback (advice, resources, ideas) from those who are currently practicing in the field, their peers.

Feedback from peer–practitioners. Feedback from multiple perspectives held considerable weight among the teachers because it came from other practitioners currently in the field. Elizabeth cited feedback from the lab teachers and facilitator as key to driving her instruction. Even Sophia mentioned in her Semester 1 reflection that feedback "with and from her colleagues" contributed to her success in implementing her teacher goals.

Feedback from the multiple perspectives of other teachers in the field was especially important to Claire, who spoke at length about her past experiences with feedback coming only from her administrators. Claire equated this type of feedback as being unhelpful because they had often not been in the classroom in years. She said in her one-to-one interview: "I feel like when we were observed by our peers, we were looking for certain things. . . . We were kind of taking in everything and giving that 'teacher-to-teacher' feedback, which I thought was really valuable."

Claire proceeded to explain receiving feedback from administrators:

> You know, . . . when you are being observed by administration—yes, they have been teachers—you hope that they get it. But I know that for some of them, they have been out of the classroom for a while; so they do not always come in with that teacher lens of . . .

> what reality is in the classroom today. . . . And they are trying to follow a rubric. . . . They are looking for specific things (May 22, 2018).

For Claire and the other teachers, feedback from other practitioners currently in the field was perceived as far more valuable in improving their current instructional practice. For example, in our second observational debrief Zoey provided Claire with feedback regarding the delivery of her lesson and how she could enhance it, especially for a student who had been absent. Zoey began her feedback by asking Claire a clarifying question. "I just had a wondering. . . Did you explicitly model how to use context clues to attack a tricky word yesterday? . . . You didn't have it in your lesson today." Claire explained that she had gone over the anchor chart with this information yesterday and figured the students had the background knowledge they needed for this lesson, but as a practitioner Zoey observed that one of the students did not understand the lesson because he had been absent and lacked the background knowledge the other students had; therefore, to extend Claire's practice, Zoey offered her the following advice:

> Then maybe since the student was absent yesterday, you could do just a quick review, showing how you feel, like "Oh, like this word!" . . . Let's look at the sentence and kind of just focus in on one to show . . . how they can do that. Just quick. . . as a reminder . . . and for the student who is absent. (Zoey, second observational debrief, November 11, 2017)

Claire sat intently listening and taking notes on the feedback that Zoey provided her and calmly replied, "I know that I need to do more of that. Thanks for the feedback." This opportunity for feedback from a group of practitioners was perceived as valuable to the teachers because it allowed them to address topics that they felt were important in their current practice as well as receive on-site coaching (problem-solving) from others currently in the field.

As a first-year teacher, Amelia seemed very appreciative of all the new knowledge she gained during her first observational debrief session about small group instruction, which she enthusiastically received because she was able to ask the cohort specific questions about the individual needs of her students. For example, when Zoey pointed out that one of her students during guided reading time did not know what to do when she came to a tricky word, Amelia indicated her frustration with the student, the "new girl" in the class with whom she really did not know where to begin instruction. She shared her frustration during the debrief:

> I have a question. So, for her situation it's a little bit tricky because she went to four schools [this year], so I already put in a PSM [problem-solving-meeting] request for her, but . . . I notice that she has trouble in reading, writing, and math. And we did like the assessment and everything. . . . She just came here during parent–teacher conference like a week ago. . . . I'm still trying to work on the strategies, . . . but [the] concept of print—she doesn't get it quite yet. She doesn't even know that you need spaces between words. (Amelia, second observational debrief, November 11, 2017)

I used this opportunity as the facilitator to defer to the teachers in the cohort, as practitioners, to share what they thought Amelia's next step with this particular student should be. Claire piped up and suggested that she should "pull her aside to work with her one-to-one on the strategies." I then offered up the idea of using choral reading as an instructional strategy to involve all students in reading. Zoey shared her experience using choral reading when she taught first grade as an instructional approach to building concepts of print and fluency with students. She said, "When I taught first grade, we did that [choral reading] during the use of a shared text during whole group. And then when you want to work on those specific strategies that's where your strategy lessons come in."

Amelia reflected on the feedback and eagerly wrote down this new idea in her teacher's notebook. Learning for Amelia continued during actionable feedback when Sophia asked a question regarding the objective of the lesson. Sophia asked Amelia the following:

> So, I have one wondering kind of similar to what other people said in terms of the second lesson. What was the purpose of the lesson? It sort of seemed like a purpose was that you wanted to assess the students because you were doing their running records, . . . but then you also gave them an opportunity to do independent reading. So I was wondering if there was another purpose or if those were the two purposes.

Amelia responded that the purpose for the lesson was to give them "feedback" because this was her "highest level group." She told Sophia,

> I wanted to give them that one-to-one feedback on how they were doing, . . . so I thought it was useful because if I circled the words that they are having trouble with [i.e., action in running records], those are the words that I want to see if there was a pattern.

I realized that Sophia was trying to point out to her that she did not have a teaching point (learning objective) for this particular small-group lesson that was based on a strategy or skill, within the instructional strategy umbrella focus of the cohort, and intervened by asking Amelia why she chose to use that assessment with this particular group.

Zoey reminded Amelia that in a "strategy lesson you have to send them off [i.e., the link part] with a strategy or skill to apply to their independent practice" and gave her the language that she could use with this group in a future lesson. She said, "Instead of saying, 'I want to see how well you are reading'—that is what you said. . . . You could tell them what you want them to do when reading their independent books. Like, oh, I want you to work on—."

Claire excitedly jumped in with a suggestion for Amelia.

Zoey agreed. “Yeah! Or a specific strategy.”

Sophia added to the conversation by clarifying for Amelia that by providing a specific purpose or teaching point for the lesson (i.e., strategy or skill on which they are working); it would help her as a teacher to “know how well they are doing.” I include these two mini-vignettes to illustrate that the feedback that both Claire and Amelia received during their observational debriefs was immediate, actionable and delivered by peer practitioners who provided direct information on how to remedy a situation with a student and what steps to take to improve her current instructional practice. This allowed for new learning to take place around the content area of focus, which for Amelia as a first-year teacher was extremely valuable.

The cohort was working with Amelia knowing that not all the feedback she had experienced during her first year of teaching had been valuable. For example, when I asked how she was doing in general at the beginning of her debrief session, she shared feeling stressed. Amelia sighed: “It was a crazy, crazy, crazy week. We got observed three times! And let’s see, . . . this is the fourth one!” Amelia’s comment suggested that she felt overwhelmed as a result of all the observations in one week that were meant to improve her practice.

When prompted, Amelia explained that the two evaluations had been for the Educator Effectiveness System (EES), an annual review that principals conducted with the Danielson Framework. Amelia said, “Yes. First it was me, and then the next day it was my co-teacher, . . . but we are still an inclusive classroom, . . . so it is me, too! I have 289 comments that I need to respond to.”

I was surprised because I could not imagine how responding to that much feedback would be useful to extending her day-to-day practice; therefore, I prompted her to explain further. Amelia said:

> The way she [the vice principal] did it is she wrote everything that I did and that the kids did and then she put it into a framework. And now I have to put where does it all fall in the Danielson, . . . but it is 289. . . . How did I even say all of that?!

Feeling Amelia's feelings of frustration of the mountain of work that lay before her in order to address her administrator's feedback, made me wonder whether she valued the format of the HLC debrief more than the EES because she could interact with her peers while they provided the feedback. For example, during our debrief sessions, Amelia was able to ask questions about problems of practice, pull ideas, and obtain resources from her peers to actually apply to her classroom practice the next day instead of just look at a list of items she had to categorize into a framework. Amelia's feelings of being overwhelmed merely reinforced what the teachers had indicated as a tension resulting from lack of time to participate fully in the HLC. Amelia also implied the importance of a sense of belonging to a cohort to create an environment in which feedback was perceived as an enhancement to practice instead of time-wasting (as in Amelia's situation).

In summary, although the cohort comprised teachers from varying grade levels and positions, the data show that they found the feedback they received supportive and applicable to their individual instruction because of their shared focus on teaching reading in small groups, content understanding, and language in the giving and receiving of that feedback. More importantly, feedback was perceived as valuable to enhancing the teachers' literacy learning because it was immediate and came directly from other practitioners in the field. Due to the amount of data I collected to confirm this subtheme, I wrote a detailed vignette of the different types of feedback that I captured from the transcripts (see Appendix T).

The teachers found the ongoing feedback from their peers valuable to enhancing their own learning and their students' learning because it was ongoing, timely, supportive, and actionable to apply the next day to their instructional practice. More importantly, feedback from other "practitioners" (teachers practicing in the field) provided them the gift of problem solving their current problems of practice with their peers. This provided them not only with ideas of what to do next, but resources and support from those at their school.

Impact on Student Learning

All the teachers in the study felt that their participation in the HLC model had a direct impact on their K–6 students' learning. This was especially true for the students whom they had monitored throughout the year (i.e., case study students). In fact, many attributed their perceptions of their students' literacy growth to the (a) attention given to the teacher's learning focus, (b) participation in the HLC learning cycle, (c) implementing parts of the HLC model in their classrooms, and (d) learning to analyze and use qualitative data. All of these attributes contributed to the teachers' perceptions of student learning as a result of their participation in the cohort.

Attention given to the teachers' learning focus. All the teachers stated that they believed their case study students showed growth in reading because of the attention to their own learning focus (i.e., teacher goal). Many expressed that this was mainly a result of their participation in the HLC learning cycle, which had built-in opportunities that supported and held them accountable to quarterly teacher goal implementation (i.e., building their content knowledge, planning their goals, spending time on implementation, collecting data). Therefore,

their learning goal for the quarter became the learning focus for the students, which had an overall impact on their literacy growth in general.

Sophia spoke extensively about how she made her teacher goals a priority focus of her library lessons. She stated:

> Well, I actually implemented it in all of my classes. It influenced all of my classes and in very positive ways. It sort of fundamentally shifted my approach; I think. . . . They had a lot more opportunity to have structured conversation in class because that was like the focus of my learning. And I think that they really got it! . . . And so it kind of led to other conversational skills. And so the types of conversations that ended up happening, you know, here and there, were richer than they might have had otherwise. (Sophia, interview, May 14, 2018)

Elizabeth and Claire both felt that their students benefited from their own learning focus and their participation in the HLC model because they were intentionally applying the strategy to their classroom instruction. Although I placed this finding under the theme of student learning, it is important to acknowledge that it also goes hand-in-hand with the theme of application.

Elizabeth said in her interview, "I mean, I feel like they all did because I was able to take my learning and apply it to them immediately." (May 14, 2018)

Claire disclosed something very similar, stating:

> I know my kids were taking whatever strategy they were learning at the time and applying to their own independent reading books, which I have seen. My sixth graders have grown a lot more than my fifth graders have overall. (Claire, interview, May 22, 2018)

The teachers attributed this student growth to their ongoing intentional practice of providing specific strategies.

When asked in their year-end interview whether they felt that their own professional learning had impacted their students' learning, all teachers agreed that it had, and they were excited to provide specific examples of their students' growth from the beginning to the end of the year. Many of the teachers became emotional during their interviews when reflecting on how motivated and enthusiastic their students had become about their own learning growth as a result. For example, during her one-to-one interview Elizabeth enthusiastically shared her observations, reflecting on the year:

> I feel like I had a lot of growth this year in reading with my kiddos, you know, obviously just based on their Star Assessment. I know that's not the only thing, but you know, comparing the data from what they had at the beginning of the year to the end of the year. And you know, seeing how far they've come! (Elizabeth, interview, May 14, 2018)

Amelia also shared the same excitement when talking about her own students' growth. She explained how many of her students had arrived at the beginning of the year hesitant about reading. She said, "It was interesting, because at the start of the year like when I started the case study group, they were very hesitant. . . . Maybe in their previous years or the previous schools, maybe they just got lost in the classroom." She provided specific examples of the change in her students' attitudes toward reading as they progressed through the year:

> So from the start of the year, my case study group didn't like to read. They made it well known, "Like, I don't read. We're not engaged." One of the students had trouble staying focused and on task, and she wouldn't participate. It was like pulling teeth for her to participate as a member! But now. . . all of them are . . . very engaged with reading, . . .

> wanting to try the activities. . . . For the girl that, you know, it's pulling teeth, . . . she's like, "I want to do that." (Amelia, April 24, 2018)

The excitement that her students brought to their reading continued and increased throughout the year, which supported Amelia in becoming more confident in her instruction and more proficient in her teaching routines. She observed improvements in her own teaching in sharing, "When we pull them [students] down, after a while they got into that routine. They knew what to expect, and they're just like, "Oh, yay! We get to do reading—What are we doing today?!"

I found it interesting to hear that as the teachers increased in their own confidence in implementing the strategies and improved their instructional practice, the students' attitudes or dispositions toward reading improved as well. In the one-to-one interview, Zoey described a personal example of how her students' learning impacted the way they viewed themselves as readers. She said:

> One of my boys started out with his fluency score . . . pretty low this year, like 13 or so at the beginning of the year, . . . not reading on level text at all. But now [at the end of the year], now they're totally in the 50s, which is, . . . I mean, . . . it's not on level, but there's been huge growth. . . . I think they've also just seen their attitude change about seeing themselves as a reader and really. . . . The fluency. (Zoey, interview, May 24, 2018)

Claire, an upper-elementary special education teacher, shared her observation about the difference she had noticed in learning between her sixth-grade case study students, with whom she applied her goals, and her fifth-grade students with whom she did not. She said:

> I have watched their scores soar! I mean, it has really made the biggest difference. And so, it has been really interesting. . . . Not that I haven't been doing things with my fifth

> graders, but my sixth graders were my case study [students], and I have much more time with them. . . . I was able to implement a solid 30-minute IR [independent reading] time. . . . It was really cool to see my students want to read and want to get into books.

Claire also proudly recalled a time when another teacher had come to share her observation of the growth of one of her students:

> I had our ELL teacher come in and say, "This kid wasn't reading. . . . He is still so low, but he wasn't even reading last year. Now he is picking up books and can't get his work done . . . because he is constantly looking at the other kids' computers and asking, "What are you reading?"

She continued to share a specific example of one of her case study student's literacy growth from the start to the end of the year:

> So the one that I'm specifically thinking about when we started the beginning of the year was [a boy who] very much needed help on the decoding. . . . When he read, it was very choppy, and [he] had a lot of trouble sounding out the words. . . . At the end of the semester, his reading, his expression, intonation, everything picked up really well. . . . His fluency increased. And then just seeing that he was able to work on his comprehension skills because he was able to not focus so much on the content, he was reading. . . . He was . . . able to learn . . . or read to learn instead of learning to read. (Claire, interview, May 22, 2018)

Sophia shared in her interview that she did not feel her case students grew any more than her other students but did state her intentionality in "planning and applying" the strategies during her lessons impacted the students' learning overall. She felt this to be true because "it deepened her understanding of what she was doing and what to do next."

All the teachers showed great enthusiasm when speaking about their students' reading growth, but Amelia became very emotional when she realized the direct impact her learning and intentional teaching had on her students' learning. She said:

> It gets me excited, and I cry because . . . they're just so motivated. You can see the motivation because they smile. . . . And then when I read with them and do a running record and [I tell them,] "I see you. . . . This is how many words you read. You read the whole thing." You can see like the light in their eyes. Like "Gosh! I actually am mastering something." And they don't feel like they're junk at it anymore. Junk at reading anymore. And you know, . . . the kids that are like coming into my group, and they're like, "Yeah! This is my favorite part of language!" (Amelia, April 24, 2018)

The examples that the teachers shared about their students' learning confirmed the good that came with the intentionality of their teaching. This in turn impacted the attitudes that they brought with them to their classroom, which transferred to their students. These new and enlightened attitudes the students brought to their reading practice bolstered the agency that most of the teachers had initially brought with them to the HLC. Each of the HLC members was able to see how their own learning successfully translated to better teaching, and better learning for their students.

Participation in the HLC learning cycle. During the year-end interview, teachers were asked the following question: *Overall, what aspect of the HLC model (cycle of learning) had the most impact in supporting your ability to apply your learning to your classroom practice to impact student learning?* In response, most of the teachers began the conversation by identifying one or two particular components but would often arrive at the conclusion that it really was the accountability that they felt to their ongoing participation in the entire learning cycle that

occurred four times in the year, that helped them to become more "intentional" or "purposeful" in their teaching, ultimately impacting their students' literacy learning.

Amelia said that she felt all the components (i.e., plan, apply, reflect, extend) had helped her to become more "purposeful" in her teaching. Sophia spoke about how the application of her learning during the plan, apply, and reflect components impacted her students' learning. She explained:

> I think that planning and applying definitely impacted the students but then also reflecting because it deepened your understanding of kind of what happened and where to go next. . . . I think that was an important step as well. (May 14, 2018)

Sophia explained in more detail what steps she took during each component and how her instruction (practice) benefited from it:

> I mean, I had to plan. You know, you have a plan, . . . and then the application . . . forced me to just do it. . . . Actually, applying it and seeing what worked and what didn't . . . rather than having it be sort of an intellectual exercise was good. The reflecting . . . like the observation reflections were really great because I liked hearing the good stuff, and I appreciated hearing actionable feedback. . . . The reflections, like even just the short semester reflection and year-end reflection, were helpful to me because it really forced me to think: "What am I taking away from this? Like what did I learn? What has changed about my teaching and about, you know, where I'm at and stuff?" And I was able to . . . voice those, and that was useful because I was like, "No, I really have learned. I really have changed." This really had made a difference, and that made me feel more positive about it and kind of walk away feeling like this was a valuable experience. (May 14, 2018)

After reflecting on her response during the interview, Sophia ultimately drew the conclusion that all components of the learning cycle supported her ability to transfer her learning to her students. She concluded, "I feel like all the parts really fit together. And if you took any one of them out it wouldn't really—it really wouldn't hold together. So, I see all of the parts working together."

Elizabeth was also in agreement that the plan and apply components helped to set her up for implementing her goal in a way that she felt impacted students' literacy growth. She said: "So I think probably the reflection part just because that's after the planning and the applying. . . . You can see how effective your planning and application [are], . . . and it kind of then sets up for your extending." She proceeded to state that her participation in the learning cycle forced her to continue to assess her instruction and its impact on her students, which ultimately impacted her students' learning. She said:

> It forced me to continue to take the assessments and to read the data and then use my strategy in groups to apply that data and then see where they were afterwards, to see if they were growing or not and being successful in what we were trying to do with the goal. (May 14, 2018)

Zoey attributed her ability to translate her professional learning to her classroom practice because of her participation in the HLC learning cycle. She said,

> I feel like my own learning helped my students to learn about fluency and how important it is. . . . I mean, I definitely feel like the teacher learning that takes place in the lab cohort transfers to the students a lot. And I feel like it's because of the model. (May 29, 2018)

However, for Zoey, reading and carrying on professional dialogue about the latest research with her peers were critical factors in supporting the transfer of her learning to her students because they extended her own content knowledge. She said:

> Yes, I feel like the lab cohort has helped my students learning and growth tremendously just because . . . if I'm not learning and I am not understanding and applying the latest research in reading, . . . then they're not going to grow as much. So I feel like the more that my content knowledge became deeper in these reading strategies and analyzing their assessments really helped to improve their practice. I mean, any of my deep learning is going to transfer to them. (Interview, May 29, 2018)

Zoey often demonstrated the bringing together of multiple components in providing acute feedback for her fellow cohort members. Because of her content knowledge growth, especially around the area of fluency (which was her goal focus), when Zoey gave feedback to her peers during observational visits, she provided specific feedback to help enhance the teachers' lessons. An example of Zoey demonstrating research, application, and close rapport with her fellow teachers could be seen in her comment to Amelia around her question of supporting her students with the automaticity of a word. "So, Rasinski [Timothy Rasinski, a fluency researcher] says that we need to be very explicit in our language when we are teaching fluency strategies to our students. You need to say, 'I'm going to teach you a strategy that fluent readers do.' So you really set them up for success." She proceeded to give her examples of different strategies that Amelia could teach like breaking the words up by syllabication or reading through the word to address her question.

Implementing the HLC model in their own classrooms. Two teachers, Amelia and Claire, took their experience with the components of the HLC model learning cycle (i.e., plan,

apply, reflect, extend) and applied it to classroom learning by having their students participate in their own goal creation, peer feedback, and self-reflection processes. For example, Amelia talked about how she used positive feedback, student interest, and choice when working with her case students during our third interim meeting. She noted, "What I'm trying to do now is work on their . . . group goals. . . . Like what do they want? What do they want to do? Like their interests." Facilitating her students' literacy learning by having her case study students co-construct a goal resembles an approach similar to what the cohort did with their umbrella focus. She went on to share how she communicated with her students:

> So, I know that with my case study group, . . . we're still working on our plans. . . . Having that goal together like "Today we're going to be working on the *s* blend," you know, . . . I think that also motivates them . . . to think that while I am in this group, I can accomplish something. I don't feel overwhelmed. I'm with a group of my peers that need the same help that I do in this certain area.

Amelia stated that she also encouraged her students to set individual goals for themselves that aligned with their group's goal. She began by asking her students what they would like to work on, differentiating their learning goals much as she had experienced in the HLC process and asking them how she could support them as the teacher. She explained how she asked this of her students:

> I tell them . . . I would like to get feedback on . . . what kind of activities would you want to do to help you reach your goal? And that makes it more engaging because some of them say, "I want to draw a picture," right, or something, say, "Oh, I want to be able to read this decodable better." (October, 19, 2017)

This is much like what the teachers do during the plan component of the HLC learning cycle, in which teachers come together and co-construct ideas about how they will learn and support their learning together.

Claire also spoke about how she found her experience during the reflect component valuable to her own learning. Therefore, she incorporated student self-reflection into her lessons to support their individual literacy learning. She said, "I forced my students to reflect . . . even after we would try something new. I would ask them, "What did you guys think? Did you like doing this?" She explained how this played out with her students:

> It was really interesting . . . because I was doing so much reflecting, and I was having to look at things and doing so much reflecting that it made me want to know. . . . "How do you guys feel about this? Do you feel like you are better readers?" . . . And I would just ask them this a lot, . . . so they got very comfortable. They will tell me when they liked it or not.

Claire also spoke about how she shared the formative assessment data she accumulated on her students to track her own goal in order to help her students self-reflect and set specific literacy goals for themselves. She said, "I printed out their tests and then graphed it out for them to support goal setting." Claire felt very pleased with sharing the changes that she saw in her students' behavior as a result of this practice. She went on to share, "I had several parents tell me, 'He is picking up books at home' or 'He is excited for the book fair.'" This confirmation from others that her students were growing in their practice really helped to reinforce Claire in incorporating more of these practices into her teaching to support her students' learning growth throughout the year.

Overall, these themes show that teachers found the active engagement activities in the HLC so beneficial in aiding their own learning that many incorporated similar practices into their own classrooms to support their students' learning, from co-constructing criteria, to setting goals and reflecting on those, to having group discussions around their (students) own learning.

Learning to analyze and use qualitative data. Teachers gave many examples of how learning to analyze qualitative data (i.e., formative literacy assessments, student work) was essential for them to track their students' progress and make adjustments to their instruction throughout the year. Many felt that this ongoing progress of monitoring and adjusting their teaching accordingly had a major impact on their students' literacy growth throughout the entire year. This again connects to the teachers' intentionality with the application of their own teacher goals, collecting data surrounding those goals and adjusting accordingly. When reflecting on what part of the model had the most impact on her learning and most influenced her instructional decisions, Zoey cited deepening her understanding in analyzing qualitative assessments. She said in her interview:

> After assessing my readers and seeing that they were lacking certain things and then reading research, I was like, "Oh, I need to go back start here. It helped me just to see that, you know, to go back meet the reader, the learner, where they need to be, that act and to really spend time . . . on those things like fluency and the parts of fluency. (May 29, 2018)

This statement was confirmed in her file folder reflection after the first observational visit when she expressed appreciation in learning how to better choose literacy assessments that will give her specific information of her students, "strengths and needs, so that I can better focus my lessons and teaching based on data." (September 14, 2017).

The ongoing practice of collecting data (e.g., artifacts) and analyzing that data (primarily qualitative) in the HLC learning cycle supported teachers in specifically knowing their students' areas of strengths and needs, helping them to become more intentional in their teaching. Elizabeth shared in her interview:

> Because we specifically looked at their data and saw their specific needs and then were able to take those needs and, you know, complete the strategy lessons and work on those specific areas. It was very intentional . . . very specific. . . . I was able to take my learning and apply it to them. And so then that would directly impact how they were learning or what they were learning, you know, based on what I learned from the data. (May 14, 2018)

Zoey also felt that her ability to qualitatively analyze the data translated into a deeper understanding of her students.

> I gained a lot of knowledge, . . . co-analyzing the data together really helped to grow my knowledge. . . . Doing the EARs [Evidence Analysis Record] to really looking at what are their strengths, what are their weaknesses, . . . to really hone in on just one thing that I can work on and then carry that data over to forming the small strategy groups or lessons. (May 29, 2018)

Amelia was very enthusiastic when she shared her observation of how the use of assessment impacted her students' learning. She said: "I can see that after doing the assessments—like even activities—and doing the strategy lessons, . . . that they've shown improvement, and even they see themselves like 'I can do it, you know, now!'" (Amelia, interview, April 24, 2018)

One tool (protocol/structure) the teachers used to support the analysis process and impact of their teaching on their students' learning was the Evidence Analysis Record (EAR). As mentioned in Chapter 3, this tool was designed to provide a step by step *qualitative* analysis of their students' work in order to pinpoint areas of strengths and needs around the instructional strategy or skill. For Claire, the EAR became a tool that really helped to personalize the learning of her students.

> We are always reflecting, but we are not always reflecting with the data in front of us. I think when we are forced to sit down and do an EAR and had to write out specific behaviors [strengths and needs]. I was able to pick out different things that I normally would not have noticed in the past through this type of reflection. (Claire, interview, May 22, 2018)

This application of the EAR provided Elizabeth and Claire feedback to guide their next few instructional steps to take with their students (i.e., knowing how to group her students and knowing what strategy to focus on next).

In general, the teachers' confidence grew through their ability to analyze qualitative data (i.e., formative assessment and student work) in order to become more intentional in their instructional decisions, which they believed made a difference for their students' learning.

It seemed that the teachers' perceptions of their students' own literacy growth were attributed by the teachers to the attention they were placing on their own learning focus. The systematic approach of the HLC learning cycle allowed them to conduct individual action research in their classrooms, while still learning collectively as a group. And the findings demonstrated that many of the teachers valued the active learning activities of the cohort,

because they brought them into their own classrooms to use with their students. As a result, the teachers felt that their students benefited as a result of their participation in with the cohort.

Tensions

The complex theme of tension is multifaceted and incorporates many other themes. This is why I decided that the best way to introduce this theme is by beginning with a vignette to help the reader get a sense of the variety of feelings that could transpire in one meeting.

For our fifth interim meeting in December, we took over the cafeteria which was bustling with lab teachers engaging in their community energizer: sharing what they wanted for Christmas with pictures on their phone. Sophia arrived late to the meeting and quickly settled into the sharing of the artifacts. I held my breath and began by saying, "I really wanted to spend the rest of the time talking about how we could create a better flow of communication and collaboration in our cohort." I could see the concerned looks on the teachers' faces. I shared from the heart that I was feeling a bit of a disconnect in the cohort and wondered whether I was the only one. I said, "Now, this could be because this is the first cohort where I am not working directly with the school on their PIP [Powerful Instructional Practice], meaning I was around the school a lot more. Or do you think it was the result of something else?"

I asked for suggestions for a remedy, then talked about the purpose of the lab anchored in a CoP. I said,

> What makes our lab different from a group of teachers getting together is that as a community of practice, we get to co-construct our experiences together. It is not just up to me even though I may be the leader of the group. We all get to help to create and

adjust our experiences to everyone's needs. That is what makes HLC great! You get what you give.

Zoey spoke up, first agreeing that she felt a different sense of closeness with a previous cohort, but perhaps this was so because she had built relationships with them before she joined.

Amelia smiled and said that she was just "trying to be a sponge," soaking up everything she was learning and trying to apply it.

Elizabeth and Claire talked about how they felt "overwhelmed" with their jobs. Elizabeth added that she did not believe she had enough time for herself, keeping up with her grade level expectations on assessments and "doing what is right for kids."

Zoey nodded in agreement.

Sophia interjected that she was still trying to figure out how the HLC umbrella focus fit in with her current role at the school and proceeded to remind them about the purpose of the HLC being a CoP, making us different from other school learning communities because this one is voluntary. She said, "If you don't feel like you can devote your energy to the process, then I am OK with you dropping out for second semester." Everyone was quiet. Sophia spoke up again saying, "I am not a quitter."

Claire nodded her head, too. The rest of the teachers just looked at me.

I then smiled and said, "It's really OK. Just let me know because it will impact the planning for our next visit." Almost in unison, the teachers all agreed they wanted to continue with the lab second semester. I mentally breathed a sigh of relief.

I have included this description that comes from my transcripts from our December interim monthly meeting to illustrate how tensions can emerge during the course of the year. In fact, the theme of tensions arose as a part of their experiences and mine as well. All five teachers

in the study referred to specific types of tensions that impacted their learning experiences and their students' learning in the study. Tensions emerged from three sources in particular: (a) lack of a clear understanding of the process from the start, (b) overscheduling as a result of other school-level commitments, (c) lack of instructional time with students.

Lack of understanding of the process from the start. Three of the five teachers mentioned lack of a clear understanding of the process during their one-to-one interviews or their Semester 1 reflections. They recalled the anxiety and confusion they felt as they began their first cycle of learning at the outset of the year. Sophia, who described herself as a "linear person . . . who likes to have everything laid out," stated that she "got lost in the weeds a little bit" at the beginning of the year. This was mainly the result of her lack of understanding the big picture of the HLC process and what was expected of them. The teachers noted that being able to see the big picture of the HLC process from the outset would have helped them in their learning. Sophia stated:

> I think that I didn't understand the process and the way that the class and the process sort of works. . . . It was confusing going along and trying to sort of like put it all together and understand how it all fit together. And I think now that I know that process, I would be able to go through it much more . . . effectively with more confidence with . . . less angst. So that was hard for me. (Sophia, interview, May 14, 2018)

Elizabeth felt a similar confusion and offered some advice during her interview: "I feel like maybe at the start of the lab, actually seeing the [course] portfolio and seeing examples of everything [would have helped] going forward [so that] . . . I could [keep] that end in mind [from] the beginning." (May 14, 2018)

The fact that all the details were not mapped out for them in a visual format impacted Amelia, a new teacher who was still trying to figure out what she was supposed to teach in general. Thus, trying to understand what her umbrella goal for the quarter would be along with understanding how all of it fit together was confusing for her. Amelia stated in her one-to-one interview, "I was so confused. . . . At the beginning I did not understood as I do now." (April 24, 2018)

In addition to feeling confused at the outset of their participation with regard to the HLC process, teachers noted that the model demanded considerable time. Sophia stated:

> In terms of making a real long-lasting, you know, making a real long-lasting change on teachers and teaching, I think that this is probably a stronger model. But it also requires a teacher—a lot of a teacher. And so, you know, you really have to have teachers participate who are willing to put in that effort and kind of go through the pain. . . . But on the other hand, it's worth it, you know. (Sophia, interview, May 14, 2018)

Reflecting on how time-consuming the assignments were, Amelia offered a suggestion during her one-to-one interview: requiring the teachers to have only two goals a year instead of one per quarter so that they have a better chance of "mastering" their goals. She stated, "This way if you didn't master your first semester goal, you could continue to see if you can reach it or change it to your second semester goal. I think that would have made it much easier . . . to focus on my goals."

Amelia's response gave me reason to pause as the designer of the HLC. This was my fourth time leading this curriculum, and I wondered whether I had become less aware of the lack of clarity regarding the process and the demands of time on the teachers. Perhaps after teaching

the program for several years I had grown less sensitive or less aware of the demands on the teachers.

Overscheduling as a result of other school-level commitments. The second tension relating to the teachers' participation in the HLC and its impact on their instructional practices of literacy was overscheduling in job duties at the school. Indeed, I had noted in the teachers' pre-reflections questionnaire, their participation during our visits, and their interview responses that most of the teachers who chose to participate in the HLC joined with considerable agency in their work; however, because of their commitment to excellence, they tended toward overscheduling. For example, Elizabeth stated in her pre-reflection, "My reason for joining was to strengthen my craft. . . . I'm always looking for opportunities to strengthen and build my foundation and find new practices or new ways to help the children and myself."

Amelia shared her reasons for participating was to grow her abilities and to communicate to her students her commitment to their learning. She said:

> As a new teacher, I believe that taking opportunities to grow will show my students that I'm committed to their success. I want the ability to better support all of my students so they may achieve more in my classroom. I have a willingness to learn, and I'm open to suggestions and changes if needed. (Amelia, pre-reflection questionnaire, May 2017)

Claire stated in her pre-reflection questionnaire that she brought with her to the cohort a "passion for teaching and a love for learning." In her one-to-one interview, she said, "I would like to develop a better understanding for appropriate and quality assessments. . . . I need to develop a better understanding of what type of assessments are the most appropriate and when to assess my students." This sense of agency to increase her ability to personalize her instruction to

fit the needs of her students revealed her commitment to an admirable level of intentionality and excellence.

As a literacy leader, I witnessed firsthand how school administrators wanted to capitalize on this commitment to excellence (agency) and often assigned these types of teachers to serve on multiple committees at the school, leaving them feeling spread too thin or overwhelmed. For example, Claire perceived her work commitments as obstacles to her professional growth as the year progressed primarily because of the demands of Individualized Education Program (IEP) meetings: She was the only special education teacher for Grades 5 and 6 and served on school ad hoc committees. She said:

> Just the way my schedule aligned with the HLC schedule, . . . everything always fell in the same week. And it would be like the week before I would have nothing, and I would be leaving here at 3 o'clock, . . . and life was wonderful. And then that week it was—Boom! We had this. . . . Boom! We have an emergency IEP! It would compound on top of each other. So I felt that sometimes I would not be as prepared as I should have been because it would just happen that week. . . . No matter how well I planned things out, it was just so busy. . . . It seemed every week that we met there were multiple crises, . . . grandma falling, things happening. (Claire, one-to-one interview, May 22, 2018)

Overscheduling led to tensions surrounding lack of time with her students because of other school responsibilities and initiatives (Individualized Education Plans and Response to Intervention). Claire continued:

> Plus it is a huge IEP time because of all of the new kids, so I was in meetings all of the time. I think that was the biggest hindering. . . . I saw a bigger difference when I was here

> all of the time. . . . I was torn being half the time with the kids and being elsewhere. (Claire, one-to-one interview, May 22, 2018)

This lack of time with their students led to feelings of tension as teachers tried to support their students' literacy growth.

Lack of instructional time with students. When asked what hindered or negatively impacted students' learning, the teachers cited a third major tension: lack of sufficient time with their case study students as a result of a variety of factors (e.g., scheduling, disruptions, RTI). Teachers strongly stated that they were unable to work with their case study students as often or as frequently as they would have wanted because of their school's rotation schedule and the grade-level pressure to cover the entire curriculum (i.e., McGraw Hill Reading Wonders). Amelia expressed her wish that teachers had more time to work with their students:

> Even with the eight-day rotation at this school, it's really hard for me to even make one day a week to have small reading group. . . . If I were to do it well, I want to take at least a whole block, you know. But how can you do a whole block if you're moving through so many subjects throughout the day? (Amelia, one-to-one interview, April 24, 2018)

Claire acknowledged frustrations resulting from the constant disruptions her class experienced. She said:

> Lack of time with my kids . . . quarter to quarter was different. First quarter, I had them all of the time. I think we made the most progress in first quarter. Second quarter was constant disruptions: We had winter program and winter break, . . . all of the things that pulled them out of their class. (Claire, one-to-one interview May 22, 2018)

She continued to share how critical it was for her to be able to work consistently with her students:

> Yeah, because they're not readers. . . . They are not independent readers. . . . We can teach them the skills and concepts, but if they are never applying them beyond what we read together in class or what we read together on the test—. Where[as] I know my kids were taking whatever strategy they were learning at the time and applying to their own independent reading books, which I have seen. My sixth graders have grown a lot more than my fifth graders have overall. (Claire, one-to-one interview, May 22, 2018)

Ironically, response to intervention (RTI) first and foremost was intended to prevent problems in students' learning and emphasize a more differentiated and intensified instruction or intervention in language and literacy, but in this context RTI had become a hindrance for the teachers trying to work with their students and apply the goals of the instructional strategy they were learning. Zoey stated in her interview, "One of the problems was during the time that I wanted to do more strategy lesson groups, they had an RTI, . . . so I had to find other times to work with them." (May 29, 2018)

Zoey's statement of frustration was ironic because it contrasted with many of the guiding principles of RTI. According to the International Literacy Association (ILA- formerly known as the International Reading Association (IRA), the initial basis of RTI was teachers taking "systematic and comprehensive approaches" in their assessment and instruction with their students. This means that the core classroom teacher, who is informed of the "researched-based practices" along with her or his own "professional expertise," has responsibility to plan, modify, and deliver core language and literacy instruction during the regular classroom time (IRA, 2010).

The time that the school gave to RTI, however, not only impacted the time that teachers had with their students, but it also impacted the time they had to collaborate. The data collected during the third observational debrief in January supported this theory when the principal came

to the cohort to ask Zoey and Amelia whether they would be "attending their RTI grade level meeting today." Zoey responded, "No, we already had it on Tuesday"; and Amelia replied, "Ours got switched. So, we're OK." This tension between the teachers and the principal caused me to reflect on the teachers' likely rescheduling their meeting on their own in order to attend the HLC observation day. Had they not had thought of this ahead of time, however, they would have been pulled from their own professional learning (that one would hope would ultimately benefit their students) to attend a meeting that the school prioritized.

As the data revealed, the RTI pull-out presented a conflict, and it became a new issue for me as a literacy leader to ponder because these teachers participated in the HLC to deepen their literacy practices in order to better serve their students, yet were unable to work with them on a consistent basis because they were always being pulled out for intervention. This level of conscientiousness or agency that the teachers brought to their participation in the HLC, their desire to improve their practice and apply their learning to enhance their students' learning, was often met with the demands of other work commitments (e.g., IEP meetings) and the lack of actual time with their students. A combination of these factors led to the teachers feeling at times overwhelmed in trying to meet their own professional learning needs as well as those of their students.

Researcher's Beliefs and Values

"If we believe that teachers are the main variable in the classroom, then we should be investing in them by understanding how they learn best." -Esmeralda Carini

As stated in Chapter 4, I was the researcher and participant in this study. In addition to my other data sources, my researcher's journal and collaboration with my critical friends (Costa & Kallick, 1993; Feldman, Altrichter, Posch & Somekh, 2018; Stolle, Frambaugh-Kritzer, Freese

& Persson, 2019) both served as places to develop insight on the relationship between my intentions for the cohort's interactions and the actual outcomes experienced by the teachers and me. I first analyzed my researcher's journal for patterns and phrases that connected to the themes arising in the data. I then shared these themes with my critical friends by participating in a serious of reflection questions and discussions at different points in my research process. From these actions the following four distinct themes emerged: (a) cultivating relationships, (b) communication, (c) reflection, (d) tension (see Table 4.2). These themes align with the themes described above, yet I have separated this analysis in order to show how I saw the importance of sharing my own values and beliefs.

Cultivating Relationships

My belief in the importance of cultivating relationships within the cohort was the source of my first theme. I demonstrated it in the language that I repeated over the course of the year. Words and phrases such as "collective trust, building community, and relationships" appeared frequently in my journal entries, especially when I reflected on my intentions for each activity. For the HLC Kick-Off at the outset of the year, I wrote that my "objective for the day was to build relationships among all members of the lab and to build a shared understanding of the model, expectations, and professional learning cycle that we will use throughout the year." The focus of this intention—to cultivate relationships—also arose again in the entry on my first observational visit, in which I reflected upon sending the email communication in hopes of connecting with the teachers when sharing the agenda before our first visit. The text of the email follows:

> I am sending an email out to keep the communication vibe flowing between me and all of the members. This is the first year where I am not really working with the teachers at

their schools providing them PD. I am noticing that this creates a feeling of detachment for me. I have also noticed that this group is not so responsive. I will need to bring this up at our next observational visit. How do we as a cohort want to keep in touch? Do we want to use FB as a platform? Do we want to use Google Drive, Lotus, or email?

Throughout my journal entries I have examples of the way I modeled my beliefs through my one-to-one email communication with the lab teachers along with individualized face-to-face visitations in their classroom when requested by them.

Table 4.2

Researcher's Beliefs and Values

Theme & Subthemes	**Descriptions**	**Findings, reframed thinking**
Cultivating Relationships • **collective trust** • **collaboration** • **co-construction** • **choice** • **attention to climate** • **attention to culture**	Trust, "collective trust," community, norms, positive communication, desire to connect to one another, learning from each other Identity bags, community energizers, allowing for choice, building a "community of trust," meaningful time spent	Modeled by facilitator to set the tone for the cohort

Communication • **individualized** • **emails** • **classroom visits** • **interim meetings** • **support** • **feedback**	Direct, clear, specific, and individualized communication with feedback on goals and next steps (actionable), keeping others informed, shared language, supportive, systematic, meeting with teachers one-to-one, resources, use of data to drive conversations, observational visits with debrief, note-taking forms, facilitator's offer to help, teacher's request for support	Must be regarded as a "shared responsibility" among all members of the group
Reflection • **feedback** • **growth in practice** • **file folders** • **debrief** • **teacher goals**	Feedback to support teacher reflection, "actionable," scaffolded, attentive, individualized, promote reflection, encouraging, meaningful debrief, focused	Feedback to support reflection in order to deepen practice, best done face to face

• **Semester 1** • **CoP survey**	reflection, built in opportunities, "risk-takers," expectations for goals, extending practice to new learning, transfer to practice, application, facilitator modeling	
Tensions • **time** • **communication** • **accountability** • **role & expectations** • **confusion process**	Feeling overwhelmed, time intensive (schedule, time), lack of communication, accountability for goals, confusion on what to bring, expectations of the facilitator vs. teacher to cultivate cohort, expectations for participation in the process	Priority of time given to activities co-constructed by all members of the cohort

Communication

Communication, the second theme, revolved around my beliefs and expectations regarding the importance of having frequent, supportive, and honest communication among all members of the group in order to cultivate connection and learning among members. This theme is very strong and appears in many entries in my journal; in addition, it played a role in the

tension theme. As the facilitator, I tried to share this belief with the teachers at various points throughout the year and tried to model the importance of communication through my actions as a facilitator; however, I found feeling connected to a few members in the cohort difficult because I did not see them face to face on a regular basis. This was the first school-level cohort that I had facilitated but was not working directly with the school on implementing a school-wide practice; therefore, I used email as my primary form of communication, which did not always work as the best tool to connect and support them.

Feedback Reflection

Another emerging theme was feedback reflection, which dealt with specific ways the feedback was delivered: (a) individualized feedback, (b) positive exchange of support, and (c) in the HLC learning cycle (systematic). When I reflected on my journal entries, I saw feedback as a tool to grow their practice and promote self-reflection. Feedback was primarily delivered through email between the teacher and me. In my journal entry after providing feedback on their second-quarter goal, I wrote that my intention was as follows: "To provide teachers with feedback on their goal formation to support successful implementation, extend their thinking, and provide resources to them."

This desire to live this intention was cited numerous times throughout the year in my journal. Even during the fourth quarter I reflected on my desire to support Claire in "feeling successful" in implementing her goal. Upon her request for feedback on her fourth-quarter goal, I offered her the following suggestions to provide feedback for her own reflection:

> My suggestion would be to extend a small but powerful aspect of your Goal #3, which will support you in planning of your strategy lessons:

Implement student conferencing or observational notes for data collection. I would be happy to give you some literature and videos to build your schema around this assessment practice. Using conferring notes to guide your instructional decisions (e.g., choosing strategies for your lessons) is a powerful skill you will be able to take on into your career.

If you decide to build upon your Goal #3, please review our feedback conversation and incorporate the ideas into your Goal #4. Does that make sense? What are your thoughts on this? :) Es

Although email was the most practical and convenient way to providing feedback, it did not always have the same impact on their instruction. I discovered many examples in my journal entries in which the teachers seemed to have experienced more success (extending their understanding in order for them to apply it to their practice) during our face-to-face interaction, such as our debrief meetings and classroom visits.

Lack of Time and Communication

The final theme to emerge from my research journal was the tension surrounding the lack of time and communication. In terms of the tension resulting from lack of time, my journal entries revealed that I, too, experienced the same feelings of being overwhelmed or feeling as if we were running out of time during meetings, much like the teachers. For example, in my first journal entry from Kick-Off Day, I reflected on my intention for them to have a meaningful day but that bringing good energy and connecting with all of the teachers was difficult for me, especially when I had to facilitate all day, and it was my "fourth PD in a row."

In some entries I expressed anxiety about running out of time at our interim meetings, usually because of excessive socializing during our community energizers, which were also

important to me in cultivating relationships. The conflict between the desire to cultivate relationships in the group and the time needed to provide opportunities for deep learning (i.e., participating in book talks, looking at student work, reflecting and revising goals) caused a continuous struggle for me throughout the year. This tension was especially pertinent when a teacher led the book talk: I did not want all of the work that she had put into planning to be devalued because we "ran out of time." An example of this feeling appeared in the following journal entry I wrote after our first interim meeting:

> We went over the norms to synthesize them a bit more as a group and then moved into our book talk that Elizabeth led. I was feeling a bit nervous about the time since we went way over at the beginning with everyone sharing out. This reminds me not to pack so much into the interim agendas and allow for flow. Elizabeth brought two templates for us to fill out (what I learned and what I still want to know). She also brought in resources to share with the cohort for note taking and small group instruction. Because I noticed that time was running short, I asked everyone whether they would be willing to spend five more minutes. They agreed, and we shared what we learned.

This theme of running out of time at meetings was repeated several more times throughout the first semester until I decided to keep the topics on the agenda short and simple for it to be more manageable and achievable in the 1.5-hour block. This resulted in the realization that a discussion around the priority of activities had to occur among members of the group in order to shape agendas that provided feelings of flow without the stress of accomplishing everything in a short amount of time.

Lack of communication among members also contributed to the theme of tension for me. In preparation for our first observational visit, I sent out an email communication expressing the

intention of connecting (cultivating relationships), setting them up for success for the day (reminding them of what to bring), and offering my help if needed in supporting their goals. When I reflected on what actually happened, however, I expressed frustration in not hearing back from anyone. I wrote the following in my researcher's journal:

> I did not get any responses after my second round of email feedback from them as what their next steps were going to be. This helps me know that I was not clear and that I need to create a simple protocol process for the teacher goal and feedback process.

Throughout my journal, examples appear of my frustration with the lack of communication with certain teachers in the cohort; Sophia and Claire in particular. For example, from the outset, Claire's lack of response to my emails was mentioned throughout my journal. I wrote on August 9, 2017, that I was frustrated about not hearing from Claire about her Quarter 1 goal. I reflected that "I knew I needed to be patient, but it does bring some concerns." Sporadic communication from Claire continued until December's interim meeting when I brought up to the cohort the tension that I felt in the apparent disconnect within the group. In reflecting on the data, I came to realize that Claire's lack of communication was probably associated with the tension of her feeling overwhelmed by her outside work responsibilities (i.e., attending IEPs, academic review meetings); however, I noticed that after I voiced my concern about this level of disconnect at our December interim meeting, she became more responsive to my emails the following semester.

HLC Activities and Assignments in Connection with Beliefs

Writing my journal, I discovered that the curriculum (i.e., activities and assignments) that I created for the HLC teachers reflected my core beliefs about teaching and learning. Table 4.3

shows how my assignments aligned with my beliefs and how I aligned my beliefs with my practices.

Table 4.3
HLC Learning Activity & Assignment

HLC Learning Activity or Assignment	Beliefs
Attend Informational Meeting	I designed this activity for the first session in order to build community by cultivating relationships among the teachers by having past lab teachers share their experiences with the HLC process and their learning experiences and answer any questions the teachers had.
Prereflection	Prereflections were designed to focus the cohort in terms of goals, intentions, and bring like-minded people together. Teachers had an opportunity to reflect on why they wanted to participate in the HLC, expressed the area of focus that they would like the cohort to have, and offered what they could bring to the cohort's learning experiences. The facilitator used this information to choose a group of "like-minded" individuals to collaborate with one another. This was important to support the overall vibe of the group.
HLC Kick-Off	Provided additional opportunities to build a sense of community at the beginning of the year by having teachers participate in a series of activities that promote collective trust (e.g., co-construction of norms and umbrella focus, sharing of identity bags). It was also a time for building a common understanding of the HLC process (i.e., shared goals, understanding, and language) in order to build unity within the group.
Co-construction and Refinement of Norm Agreements	This activity continuously occurred throughout the year because it represented the core beliefs of the group and became the foundation for relationships to be built on.

	Co-constructing norms defined what was important to the members of this particular group (community building) and served as a tool to support self- and group reflection in order to maintain a collaborative culture. Because school and human dynamics shifted throughout the year, each norm had to be reiterated throughout the year by all members of the group to bring these agreements to life and to make them meaningful for the group.
Formation of Case Study Group	In order to grow teachers' content knowledge and ability around the cohort's areas of focus (i.e., instructional strategy), they needed opportunities in which they could be successful. In this activity, teachers chose three to six students to serve as a case study group that would supply data on the impact on their learning. This was important because having a small group to try out and track progress throughout the year provided an additional scaffold of support. Keeping application and reflection narrow and tight helped the teacher to make the new skill she tried to hone in on a part of everyday practice.
Teacher Quarterly Goals	Teachers are practitioners and must have opportunities to reflect on the impact of their practice. The HLC learning cycle provided teachers a structured opportunity for action research to occur in their classroom four times per year. Teachers formulated individual goals (differentiation and choice) that aligned with the cohort's umbrella focus. The goal template prompted teachers to reflect on their (a) vision for student learning, (b) questions they may have about getting them there, (c) reflection on what the literature says, (d) their next steps, and (e) impact indicators (how they measured that it worked).

Facilitator and Peer Feedback on Goals	This activity was designed to build relationships and resource support within the group. Teachers were given built-in opportunities throughout the year to give and receive explicit and supportive feedback on their goals from the facilitator and their peers. This was important because the coaching provided by the cohort built a collective efficacy in the group. Peer feedback was important because teachers learn best from other teachers. Sharing their goals with one another highlighted the value of learning with and from one another, inspired a level of accountability to the cohort because the teachers had to explain their goals to one another, and added value to the members of the cohort as a supportive resource in extending their practice.
Monthly Interim Meetings	These meeting provided a built-in time for collaboration and sharing of learning within the group. The meetings followed a similar agenda every time to build routine. Teachers participated in a community energizer to help transition them from the workday to this new collaborative space, to build relationships, and to have fun. Then they moved into sharing an artifact from their quarterly goal. This held them accountable to the group and allowed them to share their learning for others to benefit from. Analyzing student work then followed to understand how their goals (or instructional practice) impacted their case students' level of learning.
Quarterly Observational Visits & Targeted PD	Observational visits were designed to model the focus strategy of the cohort and to allow time for professional discourse. They gave the observed teacher an opportunity to obtain feedback on the implementation of their goal as well as gain new ideas to extend their practice. Observing teachers viewed an example of the instructional practice their cohort was studying and reflected on how

	this compared or could be applied to their own goals. Teachers also targeted PD that directly aligned with their goals. This was done to build continuously on the shared understanding of the instructional practice (i.e., content knowledge and pedagogy) throughout the year.
CoP Reflection /Time for Norm Reflection (Mid-Year)	This anonymous survey provided an opportunity for teachers to self-reflect and express any needs that they may have to the cohort. This feedback gave the cohort information about the emotional health of the group without putting any one person on the spot (trust building). The cohort used this information to refine norms in order to redirect behaviors associated with support of everyone's learning in the cohort.
Semester 1 Reflection	The prompts in this activity were designed to motivate teachers' self-reflection on their past two goal cycles (i.e., what did and did not work well and why) in order to set them up for success during the second semester. It also gave them an opportunity to request additional support or voice to the group any areas of confusion or need in order to improve their learning experiences as well.
End-of-Year Survey	The survey was designed so that the cohort and the facilitator could gain an understanding of the entire process (reflection) in order to determine the strengths and areas for improvements for the following year (growth in practice: facilitator).
End-of-Year Celebration Lunch	The purpose of the event was to celebrate the work that the cohort had done together, energize the relationships formed and celebrate the progress of the teachers and students as well as to have fun with one another (cultivating relationships).

Interim Meeting for the Following Year's Cohort	The purpose of the meeting was to give the teachers an opportunity to be leaders in their schools and complex by leading the explanation of the process for other teachers interested in participating in the HLC the following year.

CHAPTER 6. DISCUSSION, IMPLICATIONS, AND CONCLUSION

Overview

This study was conducted to deepen my understanding of the lived experiences and perceptions of the teachers who participated in the HLC at their school for one academic year. Additionally, I wanted to explore my own beliefs that I had incorporated into the design of the model and to examine how well I aligned my beliefs with my practice. This information is critical for me as the designer of the HLC so I can adjust the model for future implementation. The results of this study will also inform future facilitators, staff developers, and faculty interested in providing this type of job-embedded, ongoing professional learning approach in K-12 education. And finally, my findings inform scholars who are also pursuing similar inquires.

I believe this study makes a valuable contribution to the field of teacher professional learning since it highlights the importance of anchoring TLCs (or any learning community) in a community of practice theory that emphasizes mutual engagement (choice), relationships (community), and the sharing of knowledge and creating new knowledge (resources) for the benefit of the individual and of the group.

The overarching question that guided this research study was:

What happens when five teachers participate in a TLC (the Hawaii Lab Cohort) for one academic school year to learn about literacy instructional methods?

In addition, the following sub-questions:

1. How do teachers describe their experiences from their overall participation in the TLC?

2. How does participation in a TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?
3. What are teachers' perceptions of students' literacy growth?
4. How do I align my beliefs with my practices with teaching and learning?

The study included five elementary school teachers (first through sixth grade) from Aloha Elementary, located in the Windward, Oahu school district. A qualitative action research case study design was used to analyze the data in order to bring out the teachers' voices about their personal and professional experiences as participants in the TLC. Additionally, I chose to incorporate parallel action research as a form of reflective inquiry (Herr & Anderson, 2005) which allowed me to document and examine my own practice as a participant in the cohort.

What follows in this chapter is a discussion of my findings and the implications for practice in relation to my research questions and the existing literature. The chapter concludes with recommendations for future research, as well as my final conclusion.

Discussion of Findings in Relation to the Research Questions

In this section I will discuss my findings specific to my research questions. I want to acknowledge how many of the themes discussed in Chapter 5 cross over and support one another in the analysis and discussion. Although I presented the themes independently in Chapter 5, in this analysis section the themes are not discrete or mutually exclusive to one another as they relate to my research questions. Therefore, I have extracted the most relevant themes to discuss. Hence, I use my research questions as my headings.

Research Question 1: How do teachers describe their experiences from their overall participation in the TLC?

When I analyzed how the teachers in the study *described their experiences* from their overall participation in the TLC four primary themes stood out: sense of belonging, application, feedback, and tensions.

Sense of belonging. As described in Chapter 5, the teachers in the study experienced a sense of belonging to a community, which many attributed to the voluntary nature of being a part of the TLC. This aspect of participation brought together like-minded teachers with similar goals for their own professional learning. These similar mindsets, concerns, and passion (dedication) added to their participation which resulted in their overall experience of belonging to a community. Again, this was not all a surprising finding since the HLC model is anchored in a community of practice theory (Lave & Wenger, 1991).

The teachers shared in the data that their main reason for joining the HLC was to be a part of a community where they could learn with and from their peers at their school on a topic that was important or meaningful for them. Wenger-Trayner and Wenger-Trayner (2015) remind us that CoPs are formed by people who engage in a process of collective learning in a shared domain of human endeavor. Since teacher participation in the cohort was voluntary, it created opportunities for the teachers, regardless of their role or level of expertise, to collaborate with one another around a similar topic of interest. DiMarco and Guastello's (2019) work also stated that PD should be voluntary. My data also confirms how important this aspect of choice is for teachers. For example, in this study we had a special education teacher, a librarian, and classroom teachers who were on different grade levels with varying levels of experiences (i.e., we had two veteran teachers and one novice) all working together. This provided them with the

opportunity to draw upon "multiple perspectives" to aide their learning process, which the teachers saw as a benefit to assisting the implementation of their goals and in extending their practice.

Kemmis and McTaggart (1998) point out that CoPs go beyond practice because they represent a group of people who share a concern or a passion about a topic and want to deepen their knowledge and expertise or skills by being a part of the group. This was true for the teachers in this study because they all came to the informational meeting with the desire to become better at teaching reading. Through their own sharing and negotiation with one another, they co-constructed their umbrella focus for their cohort around using small group instruction and 'strategy lessons' to teach reading. Social interaction and collaboration through the process of negotiation has been documented in the literature as a necessary element for situated learning (Lave & Wenger, 1991) since situated learning often involves learners coming together that share similar beliefs, intentions (goals) and behaviors to be acquired (Gregory, 2016). Lave and Wenger's (1991), community of practice theory provides guidance as to how to scaffold the assignments and activities to foster a sense of belonging for group members. For example, allowing the teachers to co-construct their focus for learning was essential in guiding the work of the cohort because the act of creating a shared vision or goal brings into alignment what people have in common and helps to maintain the organizational learning of the group (DuFour and Eaker, 1998; Hughes & Kritsonis, 2006; Senge et al., 2000). And although the teachers in this study all shared the same goal for their learning, they were all at different places in their understanding. Therefore, allowing them to also create their own individual goals that aligned with the umbrella focus of the cohort allowed the teachers to take their personal goals for learning and merge them with the goals of the community. According to Senge et al. (2000) the

act of creating a shared vision or goal brings into alignment what people have in common. Smith (2001) also contended that co-constructing a shared vision can be uplifting, encourage risk-taking and creativity, as well as creating energy that tends to spread among members of the group. This shared goal created a level of excitement and energy the teachers brought to their participation in the cohort which in turn impacted the types of relationships they were able to create with one another that added to their sense of belonging.

Another one of my intents in anchoring the model in a CoP theory was the emphasis on relationships. In designing the HLC, I wanted to place a focus on cultivating the personal relationships within the cohort alongside the content learning, since research has stated that relationships are essential to the learning process of the group (McLaughlin, 1993; Hord, 1997; Darling-Hammond & Richardson, 2009; Webb et al., 2009; Boone, 2010; Venables, 2011). The joint activities and discussions that the teachers had around their cohort's area of focus added to their ability to learn from one another and be accountable in their practice. During these opportunities, teachers were able to share their knowledge and expertise with one another on instructional strategies and resources to apply to their classroom, which added to the value that the teachers began to attribute to their relationships with other members in the group. This finding aligns with Lave and Wenger's (1991) suggestion that members of a CoP must identify and value the collective competence of the group to support the learning process. This can only happen if members build relationships with one another and care about their standing with each other. The teachers expressed explicitly in the data that they valued their time and participation with the cohort because of the "rich resources" (Amelia) they received; of the "supportive culture and closeness felt" (Claire); and ideas that they got around "real-life application" (Kari); that it was a "safe environment to learn in" (Elizabeth); of the "amount of research-based strategies and

content knowledge gained" (Sophia). The value that the teachers attributed to their community was essential in building trust that also influenced their participation and how much energy they were willing to give to their cohort members (Lave and Wenger, 1991).

The teachers also attributed this sense of belonging that allowed them to them feel like they could take more risks in their learning and be more vulnerable with one another. This was evident in the data through their participation in the observational visits, debriefs, and the sharing of teacher and student work. This level of risk-taking (vulnerability) extended to their instructional literacy practices in teaching reading, because they were more inclined to apply and reflect on their learning on an ongoing basis, while also being able to give and receive feedback from their peers to make adjustments to their practice. This finding could be attributed to the fact that they shared similar learning goals and had made a commitment to try to accomplish those goals collaboratively. This confirms Hord's (1997, 2004) research where shared values and visions can create a collective responsibility among members, thereby allowing them to feel safe enough to apply new ideas in order to address the needs of the teacher and students in the classroom.

Application. As I examined the application issues, the findings contribute to the literature in this area as I realized the teachers' social ties, shared commitment, and accountability motivated the application of their learning (e.g., to show up, take the risks, do the readings, participate in observational visits), as well as the level of rigor/risk of that application.

The motivation seen in the data could be attributed to the teachers' perceptions of the positive impact that their efforts as a cohort could have on their students, which may have in turn contributed to the sense of accountability and responsibility felt towards other members of the cohort (Goddard, Hoy & Hoy, 2000). This sense of responsibility was often seen in the data

during the teacher's debrief sessions, where the teachers gave each other specific feedback that addressed the learning needs of individual students (in each other's classrooms) that they were also familiar with (e.g., Kari to Claire). This finding confirms John Hattie's (2008) meta-analyses of collective teacher efficacy, which concludes that when teachers believe that they can accomplish great things together if they believe that they can make a positive difference.

I believe the teachers in this study also recognized the importance of having a collective goal that was determined by them to work towards as a school level cohort. The teachers in this study brought with them an already high level of agency to improve their practice in reading when they joined the TLC. However, during my interviews many shared that they were thrilled to have found other teachers *"just like me"* to collaborate with and learn from. This coming together as a cohort around the same goal, with this same "can-do" mentality, created a certain sense of responsibility or attitude to "show up" for one another by applying their learning in and out of their time together. This feeling of collaboration and connection contributed to the accountability that the teachers felt to their peers. Many of the teachers shared that they would not have done half the work if it wasn't for their cohort members. They did not want to let each other down due to the relational bonds that they had created. Such feelings of accountability to the cohort motivated their continuous participation and application of their learning because of the sense of community they established as a result of the ownership they had over co-constructing their learning together.

This finding aligns with social-constructivism, the Vygotskian theory that emphasizes my belief that professional development for teachers should be designed to reflect the social nature of learning. Vygotskian theory (1978) states that we learn from and with others. Therefore, teachers must be given the opportunity to talk with one another, work with and process new

information, and reflect upon new understandings with their peers during and after professional development opportunities.

Feedback. In my work teachers have often expressed feelings of frustration with being observed by their peers and administrators because they did not always find the feedback they received helpful in supporting their current problems of practice. An example of this was seen in the data with Amelia's sharing at one of our interim meetings how overwhelmed she felt by the series of observations (e.g., three-EES, grade level peer visit, and the HLC) she had experienced within one week. And with how the feedback from her yearly evaluation visit actually created more work for her since afterwards she had to respond to over 300 questions and align them to the Danielson framework. Because I was aware of these types of frustrations teachers had with classroom observational visits, I wanted to design the experience in the HLC to be different.

The positive culture that the teachers in the cohort were able to create and the use of structured protocols allowed for teacher feedback and reflection to occur which contributed to their overall experience of the TLC.

The teachers in this study were given multiple opportunities to give and receive feedback in a supportive/positive environment that allowed for teacher self-reflection to occur. The structures in the model (e.g., debrief protocol) allowed for this to occur. The data has numerous accounts where the teachers expressed how receiving feedback enhanced their practice, because it provided them the opportunity to exchange knowledge and resources with their peers around their current problems of practice. The teachers also shared that getting this time to debrief using a structured protocol made the observational visits feel worthwhile because of the cohort members' willingness to offer specific actionable feedback that supported changes to curriculum, and/or modifications to instruction, which responded to their students' learning needs. This

finding was one of my intentions in adding structured debriefs to the observational visits and confirms what was also found in the literature (Duggins, 2014; Clarke, 2009).

Another structure I put into place to help create a supportive environment for feedback was allowing for teacher choice. In this study, the teachers welcomed the feedback that they received during their observational debriefs on what worked or did not work in the lesson, because they had provided the lens for it. This meant that teachers being observed got feedback on what they asked for that was specifically aligned to their teacher goal. Their lens of focus (i.e., structure) was often aligned to their quarterly goal so the feedback that their peers were giving them was pertinent to their current focus on implementing their goal more effectively. Providing the teachers with a structure (lens of focus) in which to provide and receive feedback helped to make it more actionable to apply to their classroom instruction. This finding can be attributed to the emphasis Wiggins (2012) placed on the actionable feedback given being concrete, specific, and useful to the goal of the individual.

Tensions. Although the experiences of the teachers were positive overall, they were not without tensions, which highlight areas for improvement in the HLC model. As I had mentioned previously in Chapter 5, some of the teachers experienced angst at the start of their participation due to not having a visualization of the learning cycle and a timeline for the activities/assignments. Although the teachers were provided an explanation of the components of the framework at their informational meeting and again at the kick-off meeting, many shared that they would have liked to have had a visual of the model to understand how everything the elements of the framework, learning cycle, and CoP fit together in order to internalize the process. I tried to respond to this request during the second semester by creating a timeline of the main activities that occurred throughout the year. However, there still seemed to be a disconnect

for a few of teachers as to how each activity aligned to a particular part of the learning cycle. I realized this was a lot of information and it does take time to understand. I believe that by providing the teachers with a visual of the model, one that included the activities that supported each component of the learning cycle by quarter, I may have better supported their understanding of the process, thus resulting in some teachers feeling less stressed and confused at the start of their participation.

Another nuance in the theme of tension was due to time issues outside of the HLC. Dedicated time for the HLC was limited for the teachers, and this speaks to how overwhelmed or overscheduled our teachers are during the school day, which often leaves little time for professional learning to occur at school. According to a national survey of over 6,300 educators conducted by the National Education Association, Learning Forward, and Corwin (2017) a majority of teachers reported that leaders in their school or district are committed to that professional learning to their teachers, "however, only 25% of the teacher respondents indicated that the majority of their professional learning takes places during the school hours" (p.13). And although in this study the teachers were participating in a job-embedded professional learning opportunity where they got to practice and apply new skills with students in their own classrooms, there were still many outside expectations placed on them to participate in (e.g., school level committees, data teams, RTIs) that contributed to their feelings of being overwhelmed in and outside of the cohort time. This theme of lack of time due to the pressure of other job duties may have also had negatively impacted their students' learning. Due to the overscheduling of school duties, teachers like Amelia and Claire felt that they didn't have an adequate block of time to spend with their own students to work constructively with them. This

left the teachers often feeling frustrated since they wanted to apply the learning that they were doing in the cohort with their student.

Research Question 2: How does participation in a TLC impact teachers' instructional practices of literacy (i.e., content knowledge and pedagogy)?

When I analyzed how the HLC impacted the teachers' instructional practices of literacy, the two themes, application and feedback, corresponded most to this research question. In analyzing these two themes, I was able to gain many new insights in looking at how their experiences impacted their instructional practice.

Application. The theme of application and the associated sub-themes (i.e., systematic approach, motivated accountability to peers, and supported by shared resources) contained shared elements that contributed in impacting the teachers' instructional practice of literacy.

The teachers reported over and over in the data that the collective and systematic approach of conducting action research in their classrooms through their participation in the HLC's quarterly learning cycle, along with the shared resource of their anchor texts, helped them to not only apply and reflect on their learning, but also contributed to *the deepening* of their content learning as well. This was not surprising since the learning cycle was designed to support them in using an action research approach, which was meant to be collaborative and focused on the co-creation of new knowledge of practice (McNiff & Whitehead, 2010). According to McNiff and Whitehead (2010), individuals participate in action research (AR) to find ways to improve in the company of others by making their work visible for examination. This was true for the teachers in this study since the HLC learning cycle provided them multiple opportunities to systematically inquire into their practice. For example, the plan component of the HLC

learning cycle allowed the teachers to create their own individual teacher goals and receive feedback on those goals during the first part of the learning cycle. Many teachers repeated in the data that long-term planning helped them to become clearer on their goal and what they were striving to accomplish in their classrooms. Providing teacher-specific feedback for progressing towards a goal helps make the goal more tangible and achievable, as confirmed by Hattie (2008) and Wiggins (2012).

The application component of the HLC learning cycle involved the teachers' participation in observational visits that included an observational debrief where the observed teachers received feedback around their chosen lens of focus from their cohort members. The data showed that teachers found the observational visits critical in deepening their understanding of the instructional strategies because they got to "see it in action." Many spoke about the benefits of peer observation in the study in extending their understanding of the strategies they were implementing because it provides an example/model of practice. Those who observed the teacher got to see another approach to the strategies they were learning and apply those same lessons to their practice. Those who were observed got specific feedback to help confirm and/or extend the work they were doing with their students. This finding in the application component confirms the importance of the theory of situated learning (Lave & Wenger, 1991) for this study, since it brings the learning of a process or skill out in the open and posits assumptions that people learn from one another through observation, imitation, and modeling (Collins, Brown, & Newman, 1989).

After the debrief process was completed, the observed teachers shared out the 1-2 things they were willing to apply in their classrooms from the feedback they received. In addition, the other members reflected and shared with the observed teacher what *their* take-aways were from

the observation along with 1-2 things that *they* were going to incorporate into their own classrooms. This aligns with Wiggins' (2012) findings about the importance of the feedback loop in which others share their own learning with the one being observed.

During the reflect component of the HLC learning cycle, there were monthly interim meetings for teachers to come together to reflect and collaborate on their practice and its impact on their students' learning. They also provided evidence of their teaching, and/or their students' learning, by sharing artifacts (e.g., lesson plans, student work) in order to make their classroom teaching visible to others. Having to share artifacts of their goal implementation with other cohort members helped them to share ideas and resources with one another and keep them accountable to the application and reflection of the impact their goals were having on students' learning. Using a structured protocol (i.e., the Evidence Analysis Record) to examine their students' work really helped the teachers to adjust their teaching to address specific strengths and needs around the learning of the content and guided them in their planning process. According to Hattie (2003), when teachers reflect on the impact of their goals (or instruction) it can influence student outcomes by moving the learning from a surface level (which is simply knowing the ideas and what is needed to get a passing grade) to deep level that is more about understanding, relating, and extending ideas.

Finally, the extend component of the HLC learning cycle provided the teachers with the opportunity to extend content area knowledge by engaging in professional discussions with their peers. They also got to reflect on how their application of the strategy or skill measured up to the exemplar they were studying. And they were able to give and receive feedback from their peers on the current problems of practice which helped them reflect and adjust their teaching to better meet the needs of their students.

TLCs allow for social constructivism to occur by providing opportunities for teachers to co-construct their learning experiences through collaborative discussions and dialogue about their practice in order to develop as professionals. This aligns with Vygotsky's (1978) perspective on learning, in which cognitive development occurs when the learner participates and is engaged in shared endeavors. The systematic process of the HLC learning cycle helped to provide opportunities for these "shared endeavors" to occur, as well as provide scaffolds to support their learning processes along the way. I believe that the systematic approach that the teachers took in engaging in the HLC learning cycle helped to provide them with supports to collaboratively learn by doing.

Another aspect of the theme of application that impacted the teachers' instructional practices of literacy was the shared resources among the cohort. The teachers felt that having anchor texts (to read and have discussions around) impacted and expanded their literacy learning as a cohort, as well as individually. Since the anchor texts directly aligned to the umbrella focus of the cohort, it helped to build a shared understanding and language of the instructional strategies that they were applying in their classrooms to extend their practice. This shared language around the implementation process allowed for richer opportunities for giving and receiving of feedback because they were able to connect the specific examples from their readings to actionable feedback during observational visits. Nelsen and Cudeiro (2009) discussed the importance of teachers participating in ongoing professional readings to continue to build their knowledge base within a learning community. This was true for the teachers in this study, since many shared in the data that they deepened their content learning through the situated and social interactions they had with their peers around their anchor texts. This is an important characteristic of a community of practice and situated learning (Lave & Wenger, 1991; Wenger,

1998) since knowledge is being socially constructed in authentic contexts within a community of other practitioners who come together to learn with and from each other. When all participants are drawing knowledge from the same anchor text and focusing around the same shared concepts, it makes mutual engagement much more fruitful.

Feedback. The teachers also voiced in the data that they appreciated receiving feedback that was "immediate and ongoing" on their current practice from peer practitioners. This impacted the teachers' instructional practices of literacy because it helped them to problem solve and grow their practice in real time (meaning it addressed the current issues they were having in their classrooms to help them extend their practice). Oftentimes these observational debriefs turned into problem solving sessions to support the observed teacher in making her lesson better for her students the very next day. In these instances, the teachers often received good advice from their colleagues, as well as assignment resources and materials that they could use to modify or extend their instruction. This finding connects back to Wiggins' (2012) and Hattie's (2008) decades of research that states although feedback can be one of the most powerful influencers on student achievement, if it is not timely and ongoing it will have little impact on current student learning. This finding confirmed my beliefs that the sooner teachers can get information on their practice the sooner they can make the necessary adjustments to their lessons to address the needs and build upon the strengths of their students' learning occurring in their classroom.

Research Question 3: What are teachers' perceptions of students' literacy growth?

When I analyzed the teachers' perceptions of how their students' literacy growth was impacted during their participation in the TLC, one theme, impact on student learning, most clearly addressed this question.

My primary intent when designing the HLC was that the teachers professional learning experiences would directly impact the learning of their students since the literature points out that the whole point of teacher professional development should be to impact students' learning in the classroom (Borko, 2004; Garet et al., 2001; Yoon et al., 2007). The teachers referenced in the data that they witnessed literacy growth of their students from the start to the end of the year. They attributed these gains to the intentionality of their own quarterly goals, learning how to analyze qualitative data (i.e., formative literacy assessments, student work) using a structured protocol (i.e., EAR) to guide their instructional decisions, as well as incorporating similar activities they experienced in the HLC into their own classroom instruction.

Many teachers stated that the intentionality and focus of their teacher goals (especially on particular strategies) impacted their students' learning because of the time and attention they gave to it. The teachers in the study spoke about how taking their quarterly goals through the HLC learning cycle helped to keep them more focused with their selection of strategies, materials, and resources to better align with what they were trying to accomplish with their students. Their goals were the priority from the beginning of planning their lessons. And because the teachers spent time building their content knowledge and implementing and collecting data for a focused goal, students were provided deliberate and focused opportunities to practice and apply the strategies they were learning.

An unanticipated finding in this study was when all five of the teachers reported witnessing gains in their (case study) students' literacy learning during every phase of the yearlong HLC process during their end of the year interviews. All five of the teachers in this study reported and gave specific examples of their students' literacy growth from the start to the end of the year. The teachers saw improvements in their students' academic growth from the beginning of the HLC, and talked in detail about improvements in behaviors as a result of this. I believe this finding can be attributed to providing continuous opportunities for the teachers to analyze formative assessments (e.g., student work) using the EAR as a structured protocol and discuss student work connected to their quarterly teacher goals. By doing this they were better able to monitor the progress of those goals and adjust their teaching accordingly. An example of this was seen in Zoey's reflection on the yearlong fluency growth in one of her case study students. Formative literacy assessments throughout the year allowed Zoey to know where to pick up student instruction and create goals for learning, while making appropriate adjustments to her teaching along the way. The use of the EAR protocol was particularly important because it supported her thinking process of qualitative analysis in looking for patterns of strengths and needs, her reflecting on teaching and what the literature (anchor text) says, and her planning of next steps. Although she acknowledged that her case study student at the end of the year did not reach the grade level in his fluency she had hoped for, she was still very satisfied in the gains that he did make in reading and was able to make the connection to how his gains in reading also positively impacted his behaviors in class.

Another example of this was seen in Claire's comparison of the students in her sixth grade class (which were her case study students that she was applying the strategies with) to her fifth grade students. Claire talked about "watching their scores soar" because of the intentionality

of her teaching. She used her own data analysis (instead of a benchmark computer program which happened only once a month) to inform the design of her lessons or the particular strategies which were in alignment with the strengths and needs of her students. She then created time in her lessons for them to apply the strategies with discussion and feedback from their peers. Because she was relying more on using her own formative assessment data (with the use of the EAR to support analysis) it helped to give her and her students information on their reading progression. This had an impact on the identities students took on as readers, which was noticed by their parents and other teachers alike. These findings confirm Heller et al.'s (2012) study of how the use of structured protocols when examining student work is more effective when analyzing and discussing student work in a learning community. I believe this is true because it allows the teachers to have similar discussions and a shared lens when viewing the data. The use of the EAR protocol within the cohort helped to make the process of analyzing data among the teachers more systematic and visible to other cohort members. Heller et al. (2012) suggests that this transparency can help to support the planning process of the members of the group. Through their use of QUAL analysis, teachers felt that they had a better understanding of where their students were in their learning process and were able to adjust their teaching accordingly.

Another important finding that provided a new insight for me was how closely the teacher mirrored similar learning activities (i.e., goal setting, creating class norms, self-reflection) that they had experienced in the HLC with their students. These parallels were seen in the data where I modeled activities for them (e.g., the co-construction of community norms), they experienced it and valued it, and then they directly incorporated it with their students. Examples of this were seen in the data with the teachers supporting their students in setting

individual goals for their own learning, to having them reflect and provide feedback to one another on those goals, to co-creating classroom norms to support a positive and collaborative culture. When I created the HLC, I wanted to model the action research (AR) for my teachers since its aims and purposes are about improving learning for improving practice (McNiff & Whitehead, 2010). I wanted the teachers to experience a rigidly systematic approach to inquiry that would allow them to pose a question for their practice, choose a strategy and test it with their students, and reflect on their new learning in a collaborative setting. This way teachers could co-create their learning with other practitioners who were also exploring a similar topic of interest. In doing AR there is also a level of responsibility to learning not only for the individual, but towards other members of the group. The teachers in the study valued improving their practice through collaborative learning and wanted to give the same experience to their students. By allowing their students to create their own goals, reflect on those goals, and allow for feedback and discussion from their peers, they were applying some of the same principles of AR that they were experiencing with their students in hopes of improving their learning to improve their practice (McNiff & Whitehead, 2010).

Research Question 4: How do I align my beliefs with my practices with teaching and learning?

To answer my fourth research question, I used my researcher's journal to help me reflect on how my beliefs that I incorporated into the design of the HLC actualized during the course of the study. The intent of action research is about finding ways to improve one's practice in order to create knowledge of practice (McNiff & Whitehead, 2010). I chose to include action research as a method because I wanted to explore my own practice as a form of my own professional

development and my 'lessons learned.' One of the methods that I used to support myself in doing this systematically was by keeping an online researcher's journal to record events that took place throughout the yearlong study and my reactions to them. By maintaining my researcher's journal, I was able to create a "systematic and critical examinations of [my] actions and [my] context as a path to develop a more consciously driven mode of professional activity" (Samaras & Freese, 2006, p.11).

This study not only revealed the experiences of five teachers participating in a school-level TLC, it also helped me to reflect on my pedagogy regarding my role as a facilitator. This parallel action research (self-examination) along with the support of my critical friends (Costa & Kallick, 1993) provoked deep reflection and challenged my thinking to help me see my beliefs and assumptions of teaching and learning that I was unaware of.

I believe that literacy learning is a developmental process that is often impacted by our educational experiences, cognitive development, social-cultural, and linguistic background (Kucer & Silva, 2012). As the district literacy content specialist, I carry this belief into the classrooms that I observe and often preach how students do not all develop at the same time in their learning due to their experiences with these dimensions. I will often suggest providing scaffolds to support learning processes and that as educators we should meet our students where they are in their process. However, after a few rounds of analyzing my journal, I discovered that this belief of learning being a developmental process did not always transfer to my work with the teachers.

Although I had created the HLC model with the intentions of including a number of activities using a constructivist approach, I realized that my actions had become very outcome-oriented. This was evident in my rigid expectations for the teachers' learning production and the

timeline that they needed to accomplish it in. It was suggested to me that perhaps this rigidity came from the pressures that I was feeling since I was collecting data for my dissertation. However, reflecting more closely, I think that it had more to do with my professional work than my personal endeavor. As the content specialist of my district, I wanted to ensure that all educators (superintendent, principals, and teachers) who participated in the HLC at their schools got their expectations met, in terms of quality professional learning that impacted their students' learning outcomes (e.g., hard data in test scores). This pressure, I believe now, may have impacted my approach (and some of my decisions) that I chose to take as the facilitator throughout the course of the study.

For example, I designed the HLC to include four learning cycles for the teachers to participate in. This meant creating four different goals throughout the year to implement, collect data around, analyze, and extend to their practice. Amelia, who was a new teacher, had asked if she could just keep one goal for the whole semester and not have to create another one for the second quarter. Normally, I would have been fine with this, but because I wanted to push her instruction forward and keep to the curriculum (which was based on the requirements of the learning portfolio they would be submitting at the end of the year to their school), I encouraged her to continue to create a new goal each quarter or at least build upon the goal each quarter by adding to it. In reflecting back on my decision, I can see now that I did not take into account her own developmental process as a learner. This was a contradiction in my overall beliefs about the developmental process of learning and my initial intent in designing the HLC. Although I was aware of the importance of scaffolding the learning for the learner and had provided Amelia support through modeling and coaching, my rigidity in wanting her to accomplish all of the activities/tasks that were included in the curriculum sent a different message.

I also gained insight of my practice from discussions with my critical friends who encouraged me to 'scratch beneath the surface.' Reflecting on the language that I used in my researcher's journal when I described my observation of Sophia's participation at our debrief session, I expressed that Sophia's ability to provide supportive feedback was "slower" compared to other members at the start of the year. This observation suggested a contradiction to my belief of constructivism. Although I had pivoted my instruction many times in trying to support her process, if this was a true constructivist model, then she should be allowed to progress at her own pace.

Through my analysis process, I now realize that there were times during the course of the study where I may have seen my dissertation as something to 'prove' which did not always allow me to be open to inquiry or reflection in my own facilitation process. Since qualitative research focuses on the in-depth understanding of social phenomena in their natural setting (in this case, the teacher's classrooms), it really relies on the experiences of the participants to be meaning-making agents of their situations or experiences. Therefore, as I learned more about the process of engaging in qualitative research, I became more open minded and recognized the importance of multiple pathways for teacher learning in the HLC.

This new awareness helped me to step back and reexamine my initial intent of creating the HLC. In reflecting on the data, I realized that I needed to reexamine how my actions (expectations) and my words (language I used to describe it) went together. I also discovered through numerous discussions with my critical friends that even the language that I used to describe the model was not always in aligned with my initial intentions/beliefs in creating the model. This led me to reexamine the language I used when I spoke about the HLC. For example, calling the HLC a "model" instead of a conceptual framework, which by definition, is made up -

key factors and concepts- and the presumed relationships among them (Miles & Huberman, 1994) , reflected this misconception of my original intent since a knowledge-driven model suggests more of an operational structure designed to achieve a specific goal (Rycroft-Malone & Bucknall, 2010). This was a huge realization for me, because just this one word changes the view of the approach. In a constructivist view, the teacher's role is interactive, rooted in negotiation (Vygotsky, 1978; Duffy & Cunningham, 1996). Although there were various opportunities for the us (the teachers and me) to negotiate ways of learning and performing in the cohort, there were other activities that were not up for negotiation. Another example seen in the data was when Amelia asked if she could just keep one goal for the whole semester and not have to create another one for the second quarter. Because I wanted to push her instruction forward and keep to the curriculum, based on the requirements of the learning portfolio that they would be submitting at the end of the year to their school, I encouraged her to proceed in creating a new goal for each quarter or at least build upon the goal each quarter by adding a new thing. In reflecting now on my decision, I can see that did not really take into account her own developmental process as a learner, but was acting accordingly to implementing the HLC using a knowledge-driven model approach (Rycroft-Malone & Bucknall, 2010).

Although there were moments of tension seen on my part, there were also examples of me allowing the teachers to make their own decisions on how they wanted to proceed in their own learning process. I think the biggest example of this come from a conversation I had with the cohort at our December interim meeting regarding me wanting to provide them an option to end their participation or continue on for second semester. This came about from some frustration I was feeling with the lack of participation from a few of the teachers. But it also

came from me being willing to risk losing members (teachers) in order to hold true to the aspect of participation in the cohort being voluntary. I wrote in my researcher's journal:

> I shared with them that I was feeling a bit of a disconnect and I was not sure if it was because this was the first cohort where I was not working so closely with the school. I asked if they had any suggestions to how we could remedy this. Then I went into talking about the purpose of a lab anchored in a CoP (sharing resources, joint practices, collaborating). I told them that what makes the lab different from a group of teachers getting together is that we are a CoP and that we co-construct our experiences…that it is not only up to me…I may be the leader of the group, but everyone can help to create and adjust our experiences to their needs. "That is what makes that lab great…you get what you give!"

In reflecting on what I wrote, I think this was an example of a turn in my thinking. Instead of taking full responsibility for the learning of the teachers, I was trying to open it up to everyone in the cohort by making it more of a shared responsibility, thus bringing it back to my original intent of anchoring the TLC in a community of practice where everyone's contribution matters in shaping the learning. Although this was a huge risk on my part, because I risked losing some teachers for second semester, it felt right in my gut. I went on to share that I wanted to be seen as a "thought partner" next semester. This resonated with Elizabeth and Claire, who both responded almost immediately that they wanted me to come into their classroom in the new year and provide them feedback outside of the normal HLC observation time. In the end, after going around the table allowing everyone to share their thoughts, all of the teachers said that they wanted to continue in their participation. It was also a turning point for me in my practice where I went from feeling that it was all up to me to ensure the quality and depth of their learning while

participating in the HLC to realizing this is a shared responsibility. It also allowed me to give up some of the control that I was holding on and created more of a partnership.

In sum, my action research (self-reflection) experience helped me to realize at a deeper level how my beliefs around teaching and learning did not always align with my practices. As a qualitative researcher, I realized that I needed to have taken on a more inquiry-and-discovery approach rather than a proving one. In addition, by participating in AR, I learned that by being a participant and facilitator of the HLC, I was in control of the design of the activities that the teachers engaged in. This showed me that being the researcher and the facilitator of a study is a complex dual process; because you are so close to what you are studying, it is often hard to see the nuances in things. However, as a facilitator and staff developer, through almost a year of reflection and questioning from my critical friends, I have gained a greater awareness of teacher professional learning which I believe will help me to be more mindful of how my beliefs around teaching and learning line up in my work with my schools.

Implications

This section presents the implications for practice that will inform future facilitators, staff developers, and faculty interested in providing this type of job-embedded, ongoing professional learning in K-12 education. Based on the findings and insights of this study, I offer the six implications to consider for future facilitators.

Allow voluntary participation in TLCs (and learning communities in general)

The first implication I would suggest is that participation in learning communities be voluntary at the school level (or when used as a vehicle for teacher PD). As outlined in Chapter 2, TLCs anchored in a CoP are critical for effective teacher professional learning because they

allow for a collaborative style of learning vs. an individual style which can contribute to the teachers' sense of belonging to a community. One way to promote this sense of belonging in learning communities at their schools would be through making their participation voluntary.

My findings have strengthened my beliefs that when participation in learning communities (PLCs, TLCs, data teams) is made voluntary, teachers are more likely to leverage the power of collective teacher efficacy (Bandura 1993; Hattie, 2008) which brings teachers together with similar mindsets, goals, and agency. This may not necessarily occur when participation is mandatory. Oftentimes teachers are placed (mandated) into learning communities with their grade level teams or departments where they are given the topic of study (Cochran-Smith & Lytle, 2001). This seems to go against the professional collaboration that the school is hoping to create by using a PLC/TLC/LC structure at their schools. I believe that since participation in the HLC was voluntary, it created opportunities for the teachers to collaborate with others at their school around a similar topic of interest, even though they may have had different roles than a general ed teacher. This provided them with the opportunity to draw upon "multiple perspectives," which the teachers saw as a benefit to assisting the implementation of their goals and in extending their practice. On the other hand, Talbert's (2010) research findings state that when we require teachers to participate or take a "bureaucratic strategy" approach to implementing PLCs it removes the teachers' authority and can strip them of their role as a professional. Talbert (2010) describes patterns of teacher responses to using this type of approach as falling into three broad categories of "compliance, resistance, and anxiety" which can narrow their approach to learning (p. 563). But when we make participation in learning communities voluntary, teachers are more likely to create a culture of professional learning and

collective teacher efficacy that is more aligned to the outcomes that are important to schools and the teachers participating.

Build a culture of inquiry and relationships (trust) to create a sense of belonging.

School improvement through TLCs is only possible if teachers can trust one another enough to focus on the 'real work' of improving teaching and learning (Harris & Jones, 2010). This means addressing the hard questions about classroom practice and actively seeking, reflecting, and applying their learning in order to change their practice. In order to this, TLCs must focus on cultivating a culture of inquiry and relationships (Darling-Hammond, 2011; Kennedy, Deuel, Nelson, & Slavit, 2011). Fullan (2007) writes of the importance of creating cultures for learning within schools, or learning communities, that enable people to learn from each other. For this to occur, there must be a foundation of positive relationships where members of a community develop trust and compassion for on another (Fullan, 2007; Forsyth, Adams, & Hoy, 2011; Hargreaves, 2007). This can contribute to the cultural health of the learning community. According to Hargreaves (2007), strong and sustainable professional learning communities are:

> Characterized by strong cultures of trusted colleagues who value each other personally and professionally, who are committed to their students, who are willing to discuss and disagree about evidence and use data that can inform them about how to improve their practices in ways that benefit their students–and who are willing to challenge one another's practice in doing so. (p. 188)

While much attention has been given to creating structures for professional learning communities in schools, less attention has been given to the *quality of the relationships* among

the members of these communities (Talbert, 2010). In my own past experiences, I have been involved in many learning communities where limited attention was given to cultivating the relationships among members of the group. We were all there to "get the job done," and it didn't matter how we felt about each other, if we knew anything about the other, or if we shared any common interests or similar visions, etc. My own experience is not unlike other teachers where the attention is placed on compliance and accountability rather than cultivating relational trust among members of the community (Talbert, 2010; Forsyth, Adams, & Hoy, 2011). It was from these similar experiences and my knowledge of the research that I wanted to design an effective learning community where "educators create environments that foster mutual cooperation, emotional support, and personal growth they as work together to achieve what they cannot accomplish alone" (DuFour & Eaker, 1998, pp. xi–xii).

I found that the teachers in this study were able to create a non-threatening *culture of collaboration and inquiry* due to the co-construction of their working norms and the umbrella focus (instructional focus) of the cohort. This created a dynamic within the group that many of the teachers expressed they had not experienced in the past. For example, the teachers were given the ability to co-create their working norms with one another and to hold themselves and others accountable. There was a sense of ownership over their learning and the belief that their actions (how they showed up in the HLC) mattered to their learning and to the learning of their peers. This level of personalization of their learning helped to foster a different level of engagement (more intimate) that they were accustomed to which contributed to creating stronger relationships among all members, which supported their collaborative learning process.

Include an anchor text that aligns to the goal of the group

Another implication to consider is the importance of having an anchor text for teachers to use (read) and have professional discussions around. This can help link theory to practice, give teachers a common text to build their knowledge and beliefs about the topic, and help them to continue to develop a shared vision for professional learning and inquiry as a cohort. Oftentimes teachers are asked to implement complex learning initiatives (e.g., Guided Reading) without having the foundational understanding of how to begin implementation, what critical elements must be included in their practice, or what criteria to base their feedback on during observational visits. Having a shared anchor text can build their individual knowledge as well as the collective knowledge of the group. It can also help make their time together more valuable because it can help create a common understanding and shared language between all members of the cohort. This anchor text further supports teacher inquiry and provides a shared resource to reference for ideas and examples of practice.

Keep the cohort small -Size matters

Finally, facilitators and staff developers should consider the size of their cohorts to allow for active vs. passive participation. In order to foster a spirit of collaboration and participation among all members of the group, cohorts should be small in size. Vella's (1994, 2002) research suggests that small groups promote teamwork and encourage cooperation and collaboration among adult learners. If structured appropriately (i.e., amount), small groups can emphasize the importance of learning among members because it gives everyone an opportunity to participate in discussions and assume a variety of roles within the group.

Provide structures and choice for feedback

Structures for feedback can help to create supportive environments (foster trust, supportive language), make feedback more specific (actionable), and give teachers ownership over their observational visits. The structures for feedback and reflection during the observational debriefs provided the teachers in the study opportunities to foster trust with one another, improve collaboration, and exchange ideas/materials/resources to support their instructional practice. Also, by allowing the teachers to provide the lens of feedback to those observing them, they were able to get specific feedback that they felt was important in supporting their practice. Allowing the teacher to choose the specific area of feedback can help to make the experience more valuable to the teacher and may result in having a greater impact on improving their practice.

HLC model is not for everyone or every school

One characteristic that has resulted over years of me implementing the model, along with my own self-reflection, is that the HLC model is not for everyone due to its rigorous nature and its demands of time and resources on the part of the participants and the school.

Although at times I viewed the HLC as an effective model that should be implemented in all PD opportunities, I came to the realization that I was narrow in my view partly because of my sense of ownership and the pride in the work. However, I have learned through the process of this study that it is not realistic to expect that every implementation of the HLC will have similar results. There were hundreds of hours spent developing and adapting the model over the past four years. Because of this, I bring a deep level of knowledge and understanding of the model that is not so easily acquired. Therefore, one of my hopes for the future is to provide a

facilitator's manual that could be used to support implementation. I do believe, however, when seen as a framework, schools could apply components of the HLC to enhance the practice of their existing learning communities in order to address the specific needs of their teachers.

Another reason why this model may not be for everyone is due to the importance of the voluntary aspect of joining the HLC. I noticed while implementing the model in previous years that it tends to attract a certain type of teacher: one that brings a high level of agency to their practice, one who is a life-long learner always looking to improve in their practice for the students, and one who sees teaching as a learning profession and holds the belief that they should always be looking to extend their craft. Bandura's (1993) research on motivation showed that self-beliefs play a key role in predicting the outcome of prospective actions. Many of the teachers stated at the start of the study that they joined the HLC to improve their practice in order to be a better teacher for their students. These teachers brought with them a level of agency that motivated them to set goals and plan a course of action to achieve them. These beliefs helped them to engage with the rigorous curriculum throughout the entire year, as well as being able to subjectively reflect on their impact on their students' learning. The teachers' characteristics and findings from the study leads me to recommend that it is critical that participation in the model be kept voluntary for the schools, teachers, and facilitators.

Investment in having a content specialist to facilitate the lab

The HLC is truly authentic in its approach because it meets teachers where they are in their learning. Therefore, in order to provide this type of differentiation (i.e., addressing the variability in the teachers' understanding) to all members of the community around the area of focus, the facilitator needs to bring a breadth of knowledge and experience to meet teachers where they are in the practice. Many teachers attributed their depth of learning in part to the

close connection of a content specialist to help facilitate the learning and provide resources, coaching, and modeling of the practice they were implementing in their classroom. Therefore, the need for a content specialist to lead and engage closely with the teachers is a critical component for the depth of understanding to occur in any cohort as it did with the teachers in this study. Literacy coaches, instructional leaders, university faculty may all serve in this role. These individuals can create rich learning opportunities by facilitating experiences using active learning strategies, collaborative work, and professional discussions within the content focus of the cohort. This is where a district or school must make this investment of seeking out and hiring a facilitator that brings this level of expertise in the content as well as in the ability to work with adults. This presents several obstacles. The HLC model is contingent on the availability of such a facilitator (i.e., depth of content knowledge, interpersonal skills) who is willing to take on this role. Schools must be able to find a person with the expertise to support the level of attention that the HLC model requires and pay the costs of time and resources for the facilitator's hiring.

Recommendations for Further Research

Although this qualitative study encompassed a small group of study participants, their perspectives on their experiences along with my own reflections on the findings helped to inform research topics for further studies. Based on the findings, there are three recommendations for further research.

The first recommendation for future research is to see how the overall experiences and perceptions of this case study group aligns with other teachers who have participated in the HLC model over the past five years. Interviews of all the teachers who have participated should be taken to find patterns and trends that occur across the cohorts and if they align with the themes of the findings from this study. What aspects of the model do the teachers continue to incorporate?

How did their participation in the HLC impact their own beliefs about teaching and learning in their classrooms?

The second recommendation is to investigate the role and perceptions of those who have participated as facilitators of the model over the past five years in order to make improvements. Since I began this model in 2013, I have been mentoring other facilitators on the model. I believe strongly that this type of model could be taught or learned as a train the trainer (TT) approach. It requires a mentor-to-mentor approach because of its complexity; it involves equal attention to the relationship building as to the content learning. In order to try to achieve this, I began with asking those interested in learning how to facilitate the model to shadow me by participating in the cohort for one semester to a year. This way they would be able to experience two of the HLC learning cycles and be able to practice facilitating with my support. When they felt ready, they would then move to implementing their own cohort at their school or district with me mentoring them for one full year. In the past five years, I have mentored four other facilitators who in turn have also mentored others. Because we were looking for ways to keep this process going, we created our own "mentor hui" (cohort) online and in person, since the model has now spread to other parts of the United States.

In 2019, a teacher from the mentor cohort conducted a mini study for a course that she was taking for her doctoral program where she collected data on the facilitators' perceptions of the model (i.e., its strengths and areas for growth). During this study, the facilitators shared examples of powerful professional learning that occurred among all members, as well as areas of confusion within the model for some (e.g., using the EAR as a qualitative analysis tool). Exploring this data would provide valuable information to help revise the model and or create a guidebook for future cohorts.

The final recommendation I have for future research would be to possibly interview the principals to better understand their perceptions of having an HLC at their school. How did it impact their school's climate? Did they feel the investment of time, resources, and school funds was worth the outcomes in teacher learning?

Conclusion

For learning to be effective for teachers in the 21st century, schools need to provide more learning opportunities that are job-embedded—personalized to the teachers interests and concerns—and that provide opportunities for learning in a collaborative setting, like the teachers in this study. One of the main reasons I created the HLC model was to provide teachers PD experiences with 21st century competencies that they are expected to teach to their students. Teacher Learning Communities (TLCs) have been proven to be an effective professional development model (Darling-Hammond & Richardson, 2009; Phillips, 2003; Hollins, et al., 2004; Wilson & Berne, 1999; McConnell et al., 2013). However, even with all the benefits TLCs bring, merely creating structures in schools for teachers to collaborate will not alone create learning communities, because these structures do not, on their own, bring about a change in the culture of teaching (McLaughlin & Talbert, 2006). Therefore, it is critical that we design teacher PDs in a way that incorporates the design elements for effective teacher professional development (Darling-Hammond, Hyler, & Gardner, 2017) if we want to see these practices being implemented in the classroom for our students. Sousa (2006) tells us that our teachers, like our students, need learning experiences that are relevant and challenging, and that provide opportunities for active participation. I believe that because the teachers in this study were experiencing learning in this way, they were better able to design the learning for their students in similar ways.

The opportunity to hear and reflect on the stories of my study's teacher participants, while also reflecting on my own practice, was a valuable learning experience for me in my role as a researcher and creator of the model. Because of this study I now strongly believe that it is important to give as much time to building relational trust between the members as we do to the content learning. I believe that we can do this by anchoring TLCs in a Community of Practice theory. We can also set TLCs up for success by keeping them small in size, allowing for voluntary collaboration in school level cohorts, and allow cohorts to co-construct their working norms and learn with one another. And investment in a content specialist to support facilitation and differentiate the learning is mandatory for the HLC model.

I will never forget the advice given to me on my last day of teaching by my grade level partner. After she gave me a hug farewell, she pulled away and looked me straight into my eyes and said, "Promise me that you will *never* forget what it is like to be a teacher in the classroom." Her words still ring in my head today.

Teachers in Hawaii (and across our nation) are faced with often insurmountable tasks to accomplish in their classrooms every day, often with very little support. What keeps most teachers in the profession are the attributes that they often already bring with them: dedication, care, and the desire to be lifelong learners. I am proud of and deeply grateful for everyone who has helped create the HLC model, particularly the teachers. I am thankful for the scholars who created the research that is the foundation of this project. I am honored the HLC model has received recognition beyond Hawaii. As a former teacher, I wanted to design a model for professional learning that would enhance not only the teachers' professional practice but keep them energized and engaged in their craft. And although I now recognize that the HLC is not for everyone, I do believe it has raised the bar in expectations for teacher PD. I set out to make a

positive impact on education for teachers, and I am proud because I believe this project succeeds in doing so.

Appendix A: School Informational Flyer

KK Complex Lab Cohorts

A differentiated approach to supporting teacher professional learning and leadership in our public schools.

Facilitator: Year 4 SY 2017-2018
Esmeralda Carini, Literacy DES
Candice Frontiera, SRS

What are Hawaii Lab Cohorts?

Hawaii Lab Cohorts are teacher learning communities that offer an on-going, job embedded, differentiated approach to professional learning for teachers to keep them renewed and accountable to continuous learning and growth in their profession.

Benefits of Teacher Learning Communities

- Links Research to Practice
- Actionable Feedback
- Time for Reflection
- Fosters Transformative Teaching
- Shared Goals
- On-Going Instructional Support

Who are Lab Teachers?

RISK TAKERS

Lab teachers view themselves as LEARNERS, not experts who are willing to take risks to grow in their practice.

REFLECTIVE

Take time to reflect on their classroom practices as well as draw upon imagination and action research to develop innovations to bring to instructional decisions.

PROACTIVE

Bring a high-level of engagement and participation to co-creating the cohort's learning experience.

RESPECTFUL

Come with a growth mind-set that is respectful to where everyone is on their learning journey. They are timely, supportive, and committed to goals set by the cohort.

Informational Meeting on May 18, 2017

Mokapu Library for ELA Lab Maunawili Library for Math Lab	May 18, 2017	3:00-4:15 pm

OUR PHILOSOPHY

KK Complex

WDO

"We believe the HI Lab Cohort model for professional development is powerful because it provides teachers an opportunity for reflection and self-assessment, while simultaneously building their content area expertise and pedagogy through research based practices. The HI Lab model strengthens and extends teachers' professional practice by providing them multiple opportunities for rich peer classroom observations, the giving and receiving of actionable feedback, along with coaching and mentoring from their colleagues. Unlike traditional professional development initiatives, HI Lab Cohorts are designed to be on going to keep teachers renewed and held accountable to continuous learning and growth in their practice so they can become change agents in their schools and leaders in their profession."
~E.Carini-Year 3 ELA & Math Lab Cohort Teachers

Appendix B: An Introduction to Hawaii Lab Cohort Link

An Introduction to Hawaii Lab Cohort

What are Lab Classrooms?

- Classrooms that serve as "learning labs" for adults as well as the children in the class.
- Classrooms where teachers try out new instructional techniques in a risk-free environment.
- Classroom that sometimes have one or more teachers observing literacy instruction.

Why are we doing this?

We believe in the importance of providing a model of teacher professional learning that is designed to extend teachers' content knowledge and pedagogy while simultaneously supporting the emotional side of teaching. We also are committed to building capacity within the school and complex area so that the professional staff can continue to grow and learn without relying exclusively on outside consultants. In order to accomplish this goal, we need to identify and train "internal experts,"

KK Complex teachers who have the skills and knowledge to inspire, model, and coach other teachers.

Who are the Lab Classroom teachers and what will they do next year?

- Lab classroom teachers view themselves as LEARNERS, NOT EXPERTS.
- Lab teachers are thoughtful and reflective about teaching and learning and willing to make changes in lessons based on new understanding and learning.
- Lab classroom teachers read professional literature, participate in and are active contributors to conversations, set individual instructional goals and participate in demonstrations lessons for other lab teacher colleagues.
- Lab classroom teachers are committed to creating a community of learners by participating in the reciprocal nature of the lab.
- Lab classrooms teachers model risk taking and reflective practice.
- Lab classroom teachers will meet as a cohort with the Literacy DES for about 45 hours of "training" over the course of the year. The focus will be on sharing best practices for teachers, reading and writing and learning how to be a lab classroom teacher and facilitator within the school.
- Lab teachers will learn to facilitate professional conversations.

Expectations for Lab Teachers

- Teachers make a commitment to attend all training session days.
- Teachers Action Research-Teachers set instructional goals for themselves (based on the cohort's umbrella) and track the progression of their goals through Teacher Goal Reflection Sheets (4-5).
- Teachers will reflect on student work and use on going formative assessment practices (e.g., EAR) to drive instructional decisions and adjust their practice.

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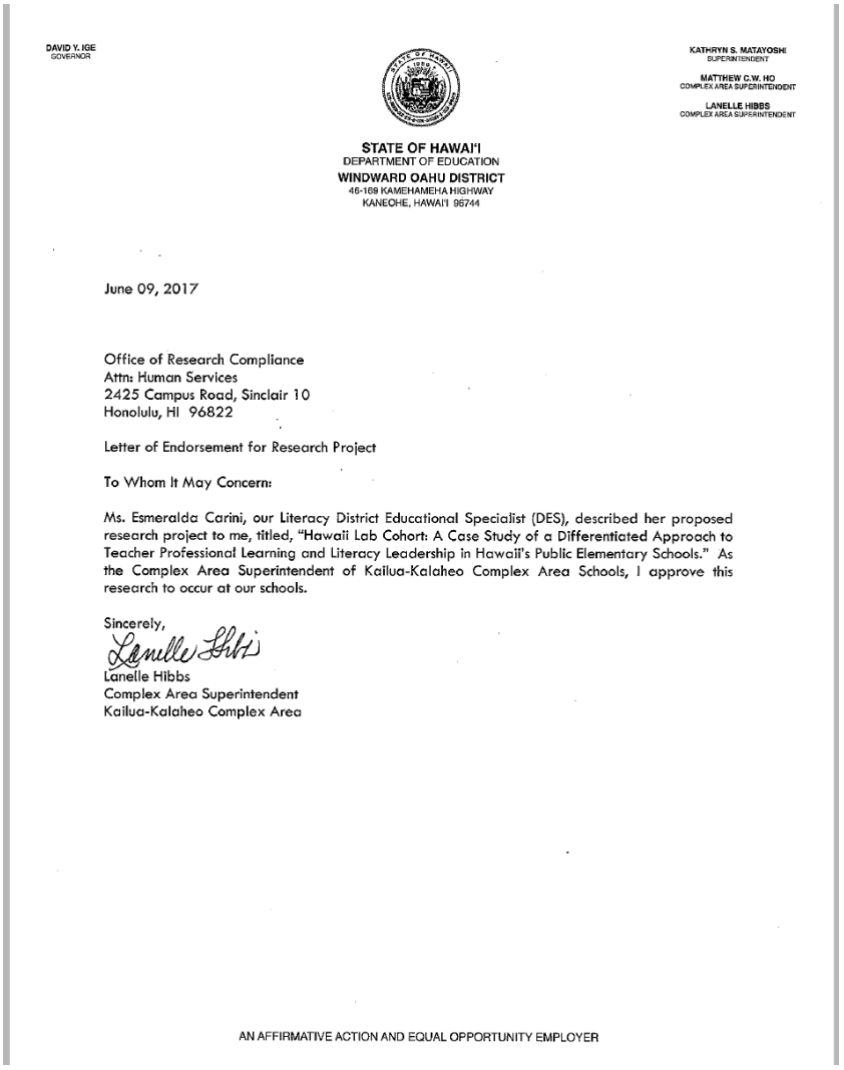
Appendix C: Signed Letter of Endorsement CAS Link



DAVID Y. IGE
GOVERNOR

KATHRYN S. MATAYOSHI
SUPERINTENDENT

MATTHEW C.W. HO
COMPLEX AREA SUPERINTENDENT

LANELLE HIBBS
COMPLEX AREA SUPERINTENDENT

STATE OF HAWAI'I
DEPARTMENT OF EDUCATION
WINDWARD OAHU DISTRICT
46-169 KAMEHAMEHA HIGHWAY
KANEOHE, HAWAI'I 96744

June 09, 2017

Office of Research Compliance
Attn: Human Services
2425 Campus Road, Sinclair 10
Honolulu, HI 96822

Letter of Endorsement for Research Project

To Whom It May Concern:

Ms. Esmeralda Carini, our Literacy District Educational Specialist (DES), described her proposed research project to me, titled, "Hawaii Lab Cohort: A Case Study of a Differentiated Approach to Teacher Professional Learning and Literacy Leadership in Hawaii's Public Elementary Schools." As the Complex Area Superintendent of Kailua-Kalaheo Complex Area Schools, I approve this research to occur at our schools.

Sincerely,
Lanelle Hibbs
Lanelle Hibbs
Complex Area Superintendent
Kailua-Kalaheo Complex Area

AN AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY EMPLOYER

Appendix D: Signed Letter of Endorsement Principal Link

Windward District, Kailua-Kalaheo Complex Area
46-169 Kamehameha Hwy
Kaneohe, HI 96744

June 09, 2017

Office of Research Compliance
Attn: Human Services
2425 Campus Road, Sinclair 10
Honolulu, HI 96822

Letter of Endorsement for Research Project

To Whom It May Concern:

Ms. Esmeralda Carini, our Literacy District Educational Specialist (DES) has described her proposed research project to me, title, "Hawaii Lab Cohort: A case study of a differentiated approach to teacher professional learning and literacy leadership in Hawaii's public elementary schools." As the principal of Mokapu Elementary School, I approve this research to occur at our school.

Dr. Charles Fradley, Mokapu Elementary Principal

Appendix E: Prospectus Spring Semester 2017 Link

Esmeralda Carini Prospectus Fall 2017	Hawaii Lab Cohort: A case study of a differentiated approach to teacher professional learning and literacy leadership in Hawaii's public elementary schools
Statement of the Problem	Problem #1 The English Language Arts Common Core State Standards (CCSS) places a notable shift on the expectation that students will become independent and proficient readers of increasingly complex text. CCSS has defined text complexity as those characteristics that make a specific text more challenging than another. To prepare students for college and careers, students must read texts of increasing complexity as they progress through grade K-12 (CCSS, Appendix A, 2010). Instruction that leads to this type of sustained comprehension and sophisticated thinking about complex text will require timely, ongoing, multi-faceted professional development (PD) for teachers and principals in order to support successful implementation. Darling-Hammond's (2010) research has shown that in order to create a strong system of teacher learning schools must provide not only a foundation of knowledge of the standards and curriculum that they are expected to implement, but also offer on going professional development opportunities for learning throughout their teaching career. However, a survey of 40 state education agencies determined that 37 states are struggling to provide professional development (PD) needed to implement the CCSS literacy standards (Kober, McIntosh, & Renter, 2013). One of the key findings of the study was the challenge of providing PD and other supports for teachers "in sufficient quantity and quality" (p.7). Given the rigorous literacy demands of the CCSS I argue the traditional models such as the "one and done" or "sit and get" workshop model of teacher PD will not be sufficient to transfer into enhancing instructional practice in the classrooms. Research on teacher professional learning over the past decade has shown that this approach to professional development does not always lead to professional learning, despite its intent (Fullan, 2007). Michael Fullan (2007) a thought leader of adult learning and teacher professional development, argues that these activities are not useless, but can never be "powerful enough, specific enough, or sustained enough to alter the culture of the classroom and school" (p. 35). Since the main intent is to impact continuous student learning, teachers need to be engaged in their own continuous learning cycle in order to respond to the ever changing needs of their students. This is why I propose Hawaii's public schools look for new ways to provide a more effective approach to professional development for their teachers. One that is sustained, ongoing, content focused and embedded in Teacher Learning Communities (TLC) where teachers work over time to solve their own problems of practice with other teachers in the same subject area or school (Hammond, 2010). Problem #2 The Hawaii Lab Cohort, a TLC model currently being implemented in Kailua Kalaheo Complex Area in Hawaii's Department of Education (HIDOE), offers an on-going, job-embedded, differentiated approach to teacher professional learning. The Hawaii Lab Cohort model is designed to be break down **professional isolation in the profession,** because it allows teachers to observe one another's teaching at their school and at other schools in their district (complex) and provide

	constructive feedback. Lab teachers meet monthly to reflect and share current instructional practice, discuss problems, and celebrate successes. The Lab Cohort model also supports the **instructional and emotional side** of teaching, because it is anchored in a Communities of Practice (CoP) approach (Lave & Wenger, 1991). Lave & Wenger (1991) believe that when learners become involved in a "community of practice", which all hold similar beliefs and goals to be acquired, the learner becomes active and engaged within the culture of the community and eventually will assume the role of the expert.
Purpose of the Study	The purpose of this qualitative case study is to explore teachers' perceptions of their participation in a Teacher Learning Community model (i.e., the Hawaii Lab Cohort) for professional learning; its impact on their content area knowledge and pedagogy in their own literacy instruction; and how this model supports the transfer of learning (e.g., teacher behaviors) into their classroom instruction.
Research Questions	The purpose of this **qualitative case study** is to explore the following question and sub-questions: What happens when *six* elementary teachers participate in a Teacher Learning Community (i.e., Hawaii Lab Cohort) model for professional learning over a period of one year to learn about literacy methods from a literacy specialist? 1. How do teachers in TLC describe their literacy learning experiences pre and post TLC? 2. How do teachers in TLC describe their emotional experiences connected to their teaching practices pre and post TLC? 3. What parts (components) of the Hawaii Lab Cohort model had the most impact in extending/changing/influencing their decision-making process (instructional behaviors) in their classrooms? 4. What is the relationship of transfer between TLC participant's new understandings of literacy instruction (i.e., around the cohort's area of focus) and their actual use of the new knowledge in their everyday pedagogical practices? How often do the teachers employ the strategy focus in their classrooms (frequency) pre/post time in the lab?
Theoretical Framework	**Communities of Practice** (Lave & Wenger, 1991/1998) is a theory that explores groups of people who share a concern or a passion for something they so and learn how to do it better as they interact regularly. Three components are required in order to considered a CoP: 1) the domain, 2) the community, and 3) the practice. Members in a CoP mutually dedicate and identify the relevant are or topic to explore. Although members in CoPs tend to come from a variety of backgrounds, they all still work together towards achieving the same goal (s), using their knowledge and skills and abilities to get themselves there (Coghlan, David; Brydon-Miller, 2014, p. 135). **Situated Learning Theory** is rooted in Vygotsky's notion of learning through

social constructivism, emphasizes the relational interdependency of the learner and the world, activity, meaning, cognition, learning and knowing (Lave & Wenger, 1991). Lave (1991) defines this view as "learning, thinking, and knowing are relations among people engaged in activity in, with, and arising from the socially culturally structured world" (p. 67); that learning is situated and can be unintentional as well as deliberate.

Social interaction and collaboration are two essential components to situated learning. Lave & Wenger (1991) believe that when learners become involved in a "community of practice", which all hold similar beliefs and goals to be acquired, the learner becomes active and engaged within the culture of the community and eventually will assume the role of the expert.

Review of Literature

Below are some potential headings for my literature review. Following these headings, I note some seminal references that will be explored.

Literacy Professional Development Models/Programs

Professional Learning Communities

- Doolittle, G., Sudeck, M., & Rattigan, P. (2008). Creating Professional Learning Communities: The Work of Professional Development Schools. *Theory Into Practice*, *47*(4), 303–310. http://doi.org/10.1080/00405840802329276
- Hord, S. M. (1997). Professional learning communities: communities of continuous inquiry and improvement. *Leadership*, *40*(1), 58–59. http://doi.org/10.1177/1365480210376487
- Putnam, J. G., & Burke, J. B. (1992). *Organizing and managing classroom learning communities. New York: McGraw-Hill.le.*

Characteristics of a Professional Learning Communities in Education

- Vescio, V., Ross, D. Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education, 24(1), 80-91.
- Newmann, F. (1996). Authentic achievement: Restructuring schools for intellectual achievement. San Francisco: Jossey-Bass Publishers.
- DuFour, R., & DuFour, R. (2010). The role of professional learning communities in advancing 21st century skills. 21st century skills: Rethinking how students learn, 77-95.

Teacher Learning Communities

- National Council of Teachers of English (NCTE) Policy Research brief (2010)
- Horn, I.S., & Little, J.W. (2010). Attending to the problems of practice:

Routines and resources for professional learning in teachers' workplace interactions. American Educational Research Journal, 47 (1), 181-217.

Teacher Professional Learning vs Professional Development

- Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. *Teaching and Teacher Education*, *27*(1), 10–20. http://doi.org/10.1016/j.tate.2010.08.007
- Bruce, C. D., Esmonde, I., Ross, J., Dookie, L., & Beatty, R. (2010). The effects of sustained classroom-embedded teacher professional learning on teacher efficacy and related student achievement. *Teaching and Teacher Education*, *26*(8), 1598–1608. http://doi.org/10.1016/j.tate.2010.06.011
- Easton, L. B. (2008). From Professional Development To Professional Learning. *The Phi Delta Kappan*, *89*(10), 755–759, 761. http://doi.org/10.2307/4079227200317217
- Mizell, H. (2010). Why Professional Development Matters. *Learning Forward (NJ)*, 1–28.
- WebsterWright, A. (2009). Reframing Professional Development Through Understanding Authentic Professional Learning. *Review of Educational Research*, *79*(2), 702739. http://doi.org/10.3102/0034654308330970

Professional Development Practices for Teachers

- Darling-Hammond, L. (2010). The Flat World and Education: How America's Commitment to Equity Will Determine Our Future. New York: Teachers College Press.
- Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. Phi Delta Kappan, 76(8).

Content Focused Teacher Professional Learning

- Van Driel, J. H., & Berry, A. (2012). Teacher Professional Development Focusing on Pedagogical Content Knowledge. *Educational Researcher*, *41*(1), 26–28. http://doi.org/10.3102/0013189X11431010

Feedback Practices That Best Support Literacy Teachers

Teacher Literacy Leadership

Literacy Specialist Role and Influence

Supporting Teachers to Teach Literacy

Adult Learning Practices

Teacher Efficacy

- Bruce, C. D., Esmonde, I., Ross, J., Dookie, L., & Beatty, R. (2010). The

	effects of sustained classroom-embedded teacher professional learning on teacher efficacy and related student achievement. *Teaching and Teacher Education*, *26*(8), 1598–1608.
Methodology	I will employ a **qualitative case study research design** to explore and understand teachers' perceptions of their participation in the Hawaii Lab Cohort, teacher learning community, model for professional development impacted teacher literacy learning and the instructional decisions made in the classroom. I would also like to explore the relationship between the teacher participant's understanding of new literacy content knowledge and pedagogy during their participation and the level of transfer to their everyday classroom practices. Case study research methods are appropriate for my study because I want to do an in-depth exploration of how the experiences (learning) of the teachers who have participated in the Hawaii Lab Cohort model (curriculum) for teacher professional development have shaped their instructional practice. Clark & Creswell (2010) defines case study research design as a set of qualitative procedures to explore a bounded system of interest (i.e., program, event, or activity) involving individuals (p. 242). Creswell (2009) defines case studies as a strategy of inquiry in which the researcher explores in depth a program, event activity, process or one or more individuals (p.13). Creswell goes on to emphasize that cases are bounded by time and activity, and that researchers collect detailed information using a variety of data collection procedures over a sustained period of time. My study qualifies as a case study research design, because as the creator and facilitator of the Hawaii Lab Cohort, I seek to explore the teachers' experiences of the model with in a school cohort (Mokapu Elementary School) over the course of a year, collecting multiple sources of data (e.g., observations, interviews, audiovisual material, and field notes), to understand cased-based themes around the model's impact on the teachers' learning in order to improve the model for future professional development purposes.
Boundaries of the Study	**Setting.** The study will take place at Mokapu Elementary School, a public school within Hawaii Department of Education (HIDOE) Kailua Kalaheo (KK) Complex Area Schools, Windward District. Mokapu Elementary is the largest school on the Windward side of the island with an enrollment of over 800 students in Pre-Kindergarten through Grade 6. The school is located on the Marine Corps Base Hawaii (MCBH), which serves both Marine and Navy personnel and their families. The study will take place from August 2017 to June 2018. **Participants.** The study will involve a selective sampling of teacher participants from Mokapu Elementary ELA (literacy) Lab Cohort Year 4. Since participation in the lab is voluntary, the demographics of teacher participants could range from new to veteran teachers, a representative from every grade level, and/or include general education and special education teachers. Before I will be able to begin collection for the study, I will have to seek approval from the University of

	Hawai'i Human Subjects Committee and from the HIDOE. **Events.** Using an qualitative case study research design (Creswell & Plano Clark, 2010) this study will seek to examine and understand the teachers' perceptions of how the Hawaii Lab Cohort (framework/curriculum) impacts their literacy content knowledge and pedagogy around a particular area of study; and the transfer of the learning into their classroom practice. **Processes.** I will pay particular attention to the teachers' goal setting and the observational visit day of the lab which includes: teachers observing a fellow lab teacher around the cohort's area of study, providing the lab teacher observed specific feedback reflective of their instructional goals, and participating in professional development given by the facilitator around the cohort's chosen area of focus. I will look to survey and interview the X current lab teachers (former lab teachers) during the end of spring semester 2018.
Description of Participants-Sample Selection	A selective sampling of teacher participants will include elementary teachers who have participated in past (Year 1-3) and current school lab cohort (i.e., Mokapu Elementary School Year 4) as a voluntary professional development opportunity to enhanced their literacy instruction and literacy leadership abilities in their classrooms.
Description of Site	This study will take place in the HIDOE, Kailua Kalaheo Complex Area Schools, Windward District. Mokapu Elementary is the largest school on the Windward side of the island with an enrollment of over 800 students in Pre-Kindergarten through Grade 6. The school is located on the Marine Corps Base Hawaii (MCBH), which serves both Marine and Navy personnel and their families.
Data Collection and Data Analysis Plan	Since the study will be a form of a qualitative case study, I will use the following methods for data collection and analysis: Researcher Journal: I will use past research journals from Year 1-3 of the lab cohorts (SY 2014-15, 2015-16, 2016-2017) to provide a basis for my dissertation research. I will analyze the trends in teachers' participation (e.g., goal setting, observational visits) and feedback to support my planning for Year 4 (SY 2017-18) and to provide me with qualitative data around creating effective research questions for my study. Teacher Surveys (pre and post year): I will use pre and post surveys to identify teachers' perceptions of literacy teaching experiences before and after the participating in the cohort. I will analyze the data for patterns and trends around how their participation influenced their instructional decisions around literacy in their classrooms. What new content area knowledge/pedagogy did they gain from their participation? How did feedback from a content specialist and their lab peers

	influenced their instructional practice? What knowledge, practices, and or beliefs have transfer to every day instructional practices? Lab Teacher Interviews: I will conduct one to one teacher interviews in order to better understand their experiences of the Hawaii Lab Cohort model for teacher professional learning (PL). What component of the model most contributed to strengthening their literacy learning/instruction? I will conduct interviews current lab teachers at the end of the second semester SY2017-18. Lab Observational Visits: I will use the feedback forms that lab teachers and literacy specialist use on the five observational visits to scribe and give the observed teacher specific feedback on their area focus for patterns and trends in supporting professional learning. I will also look to what the observed teacher's 1-2 "takeaways" were from the feedback received during field observations and use **direct interpretation** to see how the feedback received plays out in their classroom decisions. Lab Teacher Goal Reflection Sheets: I will also do an examination of patterns and trends found on the teacher`s goal reflection sheets (per quarter/ 4 goals per year) and observational notes taken during their observational/peer visits for areas of growth in content or pedagogy. Field Notes: I will use my field notes from my classroom observations (SY17-18) to observe and examine how feedback from a literacy specialist and their peers influenced instructional decisions during and after their participation in school level or complex level HI Lab Cohort. Reflection Journal: I am also considering using a reflection journal to record my experiences around my research questions in order to capture patterns in trends among the teachers and myself in this process. In using these methods, I hope to explore the contributions of using the Hawaii Lab Cohort (i.e., teacher learning communities) model for teacher professional learning has on strengthening literacy instruction and teacher leadership in our public schools.
Ensuring Quality and Credibility	To ensure credibility my study I will borrow from the method to describe how I will ensure quality. Creswell (2013) states that validity in qualitative research does not carry the same connotations as it does in qualitative research, "nor is it a companion of reliability (i.e, consistency in responses) or generalizability (i.e., the external validity of applying results to new settings, people, or samples) (p. 190). Qualitative validity indicates that the researcher checks for accuracy of the findings using certain procedures and checks those procedures across different researchers and different projects that involve a similar type of study (Creswell, 2013; Herr & Anderson, 2005). Graham (2007) suggests qualitative researchers to use validity strategies within the proposal of their study to "enhance" the researcher's ability to assess the accuracy of the findings, as well as convince the readers of that accuracy. Although eight strategies were recommended, for my

	study I plan to implement the following four: **Triangulate the date.** I will use data sources of information (i.e., interview, field observations, and teacher goal setting and reflection) to establish justification for my themes established in my findings. **Use member checking.** To determine the accuracy of my findings (i.e., themes, descriptions) I will share them the final draft version of my finding with the teacher participants in the study for feedback on accuracy. I will do this by scheduling follow-up interviews with the teacher participants to give them opportunity to comment on my findings. **Use rich, think descriptions.** I will use descriptive language to convey my findings in the study, to really paint a picture for the reader of the setting, the participants and the experiences/events that take place during the study. **Clarify the bias of the researcher.** I will clarify the bias that I bring to the study as the creator and facilitator of the curriculum that I would like to examine. I will also try to use self-reflection in the form of a journal writing as a way to be open and honest with my readers and to aide me in my interpretations of my findings.
Limitations	I am the creator and lead facilitator of the Hawaii Lab Cohort model for teacher professional development in the DOE for the past three years. I have already formed beliefs and opinions as to why this approach for teacher PD is effective, valuable and critical in creating teacher leaders (change agents) in our schools. It is my intention to identify my own basis, perceptions, and hopes that I bring prior to the study and to strive to not introduce biases into the interviewing process, participant selection, nor influence my findings during my data analysis. I am using a convenience sample of only teachers who have participated an or are currently participation in the ELA Hawaii Lab Cohort model (I will either choose from a sample of 30 lab teachers, includes the past and current teachers who have participated in the model, or conduct the study only on the teachers in Year 4 ELA Lab Cohort 2017-18 SY) that I have facilitated and will not be able to make broad generalizations about the findings.
Timeline to Completion	• Summer 2017- submit IRB to UHM and DOE, refine questions for interview/surveys, submit draft proposal to advisor, set up study for SY 2017-18 school year • Fall Semester 2017- begin study at Mokapu Elementary; begin collecting data from lab teachers; give on-line Teacher Norm Survey Agreements • Spring 2018- continue data collection; give End of the Year survey; begin 6-month sabbatical? • Fall 2018- analyze data; continue writing dissertation; defend dissertation • Spring 2019- final revisions; check submission date for dissertation; graduate

Appendix F: Aloha Elementary ELA Lab Cohort PD Plan SY17-18 Link

Hawaii Lab Cohort (ELA) Aloha Elementary School
SY 2017-2018

Desired Outcomes:

- **To promote a differentiated approach to supporting teacher professionalism and leadership in our complex area schools;**
- **To engage teachers in a model for professional development that incorporates Teacher Learning Communities (TLC) anchored in a Community of Practice (CoP); one that enhances teacher quality by offering an on-going, job embedded, differentiated approach to professional development, one that keeps teachers renewed and accountable to continuous learning and growth in their profession;**
- **To build internal capacity, change agents, in our schools so that we are not reliant on outside consultants.**

Session	Focus Activity	Date & Time
Teacher Submit *	**Teacher Lab Pre-Reflection Application to Lab Participation** • Mandatory Informational Meeting on May 18, 2017 • Pre-reflection forms due by May 26	Deadline May 26, 2017
*	**Hawaii Lab Cohort Back to School "Kick Off" Day (ELA & Math)** • Mandatory for participation	July 31, 2017 WDO~8:30-3:00
Teacher Submit	**Teacher Goal Reflection Sheet #1 (1st quarter)**	August 2017
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	August 17 3:00-4:15
#1	**Lab Observational Visit/PD Session**	Sept. 14, 2017*
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	September 21 3:00-4:15
Teacher Submit	**Teacher Goal Reflection Sheet #2 (2nd quarter)**	October 2017
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	October 19 3:00-4:15
#2	**Lab Observational Visit/PD Session**	November 09, 2017
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	November 16* 3:00-4:15
DES/Teacher	**Lab Cohort Norm Agreement Check-in Survey**	November 2017
Teacher Submit	**Teacher Semester Reflection on Goals**	December 2017
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	December 14 3:00-4:15
Teacher Submit	**Teacher Goal Reflection Sheet #3 (3rd quarter)**	January 2018
#3	**Lab Observational Visit/PD Session**	Jan. 11, 2018
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	February 08 3:00-4:15
Teacher Submit	**Teacher Goal Reflection Sheet #4 (4th quarter)**	March-April 2018
Lab Partner Submit	**Teacher Partner Research Lesson/Observation**	Feb/March/May 2018
#4	**Lab Observational Visit/PD Session**	March 01, 2018
Interim	**Lab Teacher Meeting @ Mokapu School Lib**	April 05 3:00-4:15
#5	**Lab Observational Visit/PD Session**	April 26, 2018 Reschedule April 12, 2018
Interim	**Lab Teacher Informational Meeting-Year 5 @ Mokapu School Lib**	May 10 3:00-4:15
DES/Teacher	**End of the Year Lab Survey Reflection**	May 2018
Teacher Submit	**PDE3 Teacher Learning Portfolio Submission**	June 2018 TBA

E. Carini, District Literacy Content Specialist, Windward District-Kailua Kalaheo Complex, Spring 2017

Appendix G: Prereflection Form Link

Informational Meeting
May 18, 2017

Teacher: Mokapu/Grade:

Hawaii Lab Cohort SY 2017-18
Pre-Cohort Teacher Reflection Sheet

Please Note: You may write directly into the word document/save it with your first and last name/email it back to me by June 2, 2017.

In order to support the reflective nature of participating in a lab cohort, I would like to begin by asking you to share with me your thoughts on the following questions:

1. **What are your reasons for wanting to participate in the Hawaii Lab Cohort model for teacher professional learning?**

2. **What instructional strategy or skill (e.g., Guided Reading) would you like your lab's umbrella of focus to be next year? Why?**

3. **What will your participation bring to *support* the lab cohort model for teacher professional development (i.e., community of practice, reciprocal style of learning, cultivating teacher professionalism) and/or how will the other lab teachers *benefit* from you being a member of the cohort?**

Appendix H: Teacher Quarterly Goal Form Link

2017-18

Teacher: Grade:

Lab Cohort
Teacher Reflection Sheet
Quarterly Goal

In order to support the reflective nature of participating in a lab cohort, please share with me one instructional learning goal that "links" to your rain drop under your cohort's umbrella.

Lab Umbrella Instructional Goal for 1st Quarter:

Vision for Student Achievement: *By the end of this quarter, I would like my students to know and be able to ...*

Teacher Question: *How do I teach ...?*

Research: *Some effective practices I've found in the literature are....*

Immediate Goal: *I will begin to... commit to...*

Plan for Instruction: (be specific on next steps, resources and/or supports e.g., name the source, chapter, video)

"Know Thy Impact" Indicators (list 1-2 indicators of progress you will use to reflect on): *I will know my plan is making an* ***impact on learning*** *because...*

Appendix I: Artifact Caption Sheet Link

ELA Lab Cohort (Elementary)
Evidence Results Portfolio
Artifact/Evidence Cover Sheet

Criteria addressed:

- **Artifacts Reflective of Teacher Goal Reflection Focus (TGRS):** Artifacts that are reflective of the *primary focus* for each Teacher Goal Reflection Sheet (TGRS) submitted (e.g. information regarding decisions made in classroom environment, scheduling, grouping of students, anchor charts, conferring notes, running records or informal reading inventories, and student work) (4-5 sets).

Artifact Overview

What the artifact (?) is …

Why I chose this particular strategy or skill…

It's impact on my students learning…

Appendix I: Lab Observation Feedback Forms Link

Observational Feedback

Observer's Name: _____ **Date**: _____

Classroom Visited: Teacher/Grade
Lens of Focus:

I noticed *... (what you saw and heard)*	***My thinking about this ...*** *(wondering, questions, ideas, etc.)*
Implications for your own practice: *(after debrief with teacher whose classroom you visited)*	

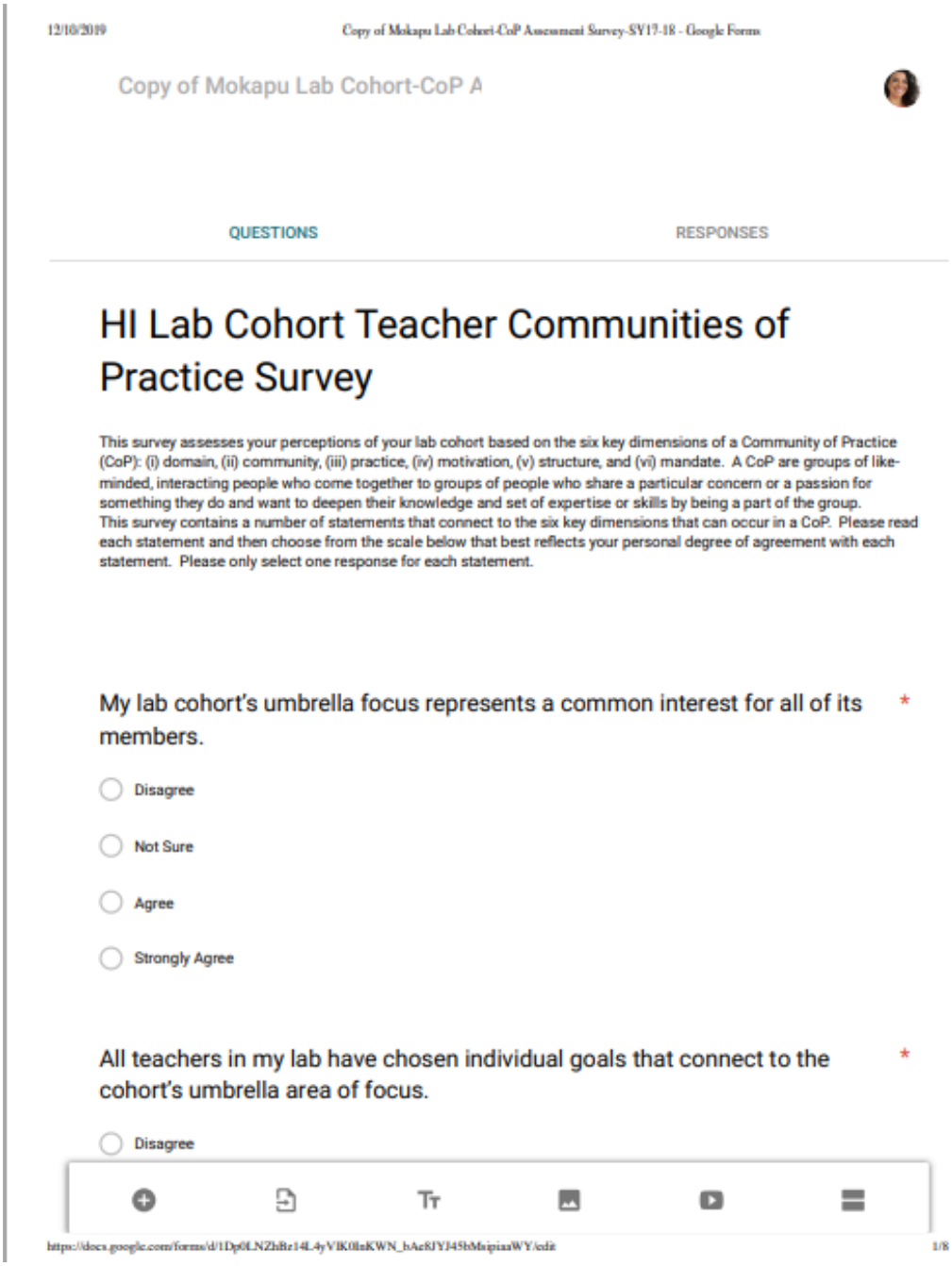
Appendix J: Lab Observational Debrief Form Link

Hawaii Lab Debrief Collection Form

Lab Teacher:	Date:
Lens of Focus:	

Observers	WOWs!	Wonderings & Actionable Feedback

Appendix K: CoP Mid-Year Survey Link



12/10/2019 Copy of Mokapu Lab Cohort-CoP Assessment Survey-SY17-18 - Google Forms

Copy of Mokapu Lab Cohort-CoP A

QUESTIONS RESPONSES

HI Lab Cohort Teacher Communities of Practice Survey

This survey assesses your perceptions of your lab cohort based on the six key dimensions of a Community of Practice (CoP): (i) domain, (ii) community, (iii) practice, (iv) motivation, (v) structure, and (vi) mandate. A CoP are groups of like-minded, interacting people who come together to groups of people who share a particular concern or a passion for something they do and want to deepen their knowledge and set of expertise or skills by being a part of the group.
This survey contains a number of statements that connect to the six key dimensions that can occur in a CoP. Please read each statement and then choose from the scale below that best reflects your personal degree of agreement with each statement. Please only select one response for each statement.

My lab cohort's umbrella focus represents a common interest for all of its members. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

All teachers in my lab have chosen individual goals that connect to the cohort's umbrella area of focus. *

- Disagree

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- Agree
- Strongly Agree

Being a part of my lab gives me a sense of belonging. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Why do you think this?

Long answer text

Being a part of my lab helps me build relationships and network with other teachers. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Why do you think this? Could you provide an example?

Long answer text

My participation (experiences) in the lab cohort is relevant to my current work position. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Can you provide an example?

Long answer text

My participation in my lab benefits my daily work from the relationships that I have established. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Why do you think this?

Long answer text

Our norm agreements are clearly defined in my lab. *

Helping to connect theory to practice

- Not Sure
- Agree
- Strongly Agree

Reviewing and refining our norms agreements is an on-going process in my lab. *

Helping to connect theory to practice

- Disagree
- Not Sure
- Agree
- Strongly Agree

There is a balance of giving and taking among all members in my lab. *

Helping to connect theory to practice

- Disagree
- Not Sure
- Agree
- Strongly Agree

The lab framework for professional learning is clear and flexible to me. *

- Disagree

Not Sure

Agree

Strongly Agree

Roles and expectations for participation are clearly defined (e.g., facilitator, observer). *

Disagree

Not Sure

Agree

Strongly Agree

My lab provides me opportunities to meet face to face, fellowship, and learn from other members. *

Disagree

Not Sure

Agree

Strongly Agree

My lab makes time to recognize and celebrate the work (learning) of its members. *

Disagree

Not Sure

Strongly Agree

Being a part of the lab helps me to achieve better results in my classroom instruction. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

I feel more confident in my ability to implement my teacher goals connected to my lab's umbrella focus. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

My lab has built a set of communal resources that I can use to support my work. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

supporting my learning process.

- Disagree
- Not Sure
- Agree
- Strongly Agree

Being a part of my lab has added to my content area knowledge and/or pedagogy around my cohort's area of focus. *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Being a part of the lab has helped me feel more social supported by others in my profession (e.g., teachers connecting with other teachers). *

- Disagree
- Not Sure
- Agree
- Strongly Agree

Being a part of my lab has contributed to my quality as a professional educator. *

Not Sure

Agree

Strongly Agree

What motivates me to continually participate in my lab is...

Long answer text

What limits my participation is...

Option 1

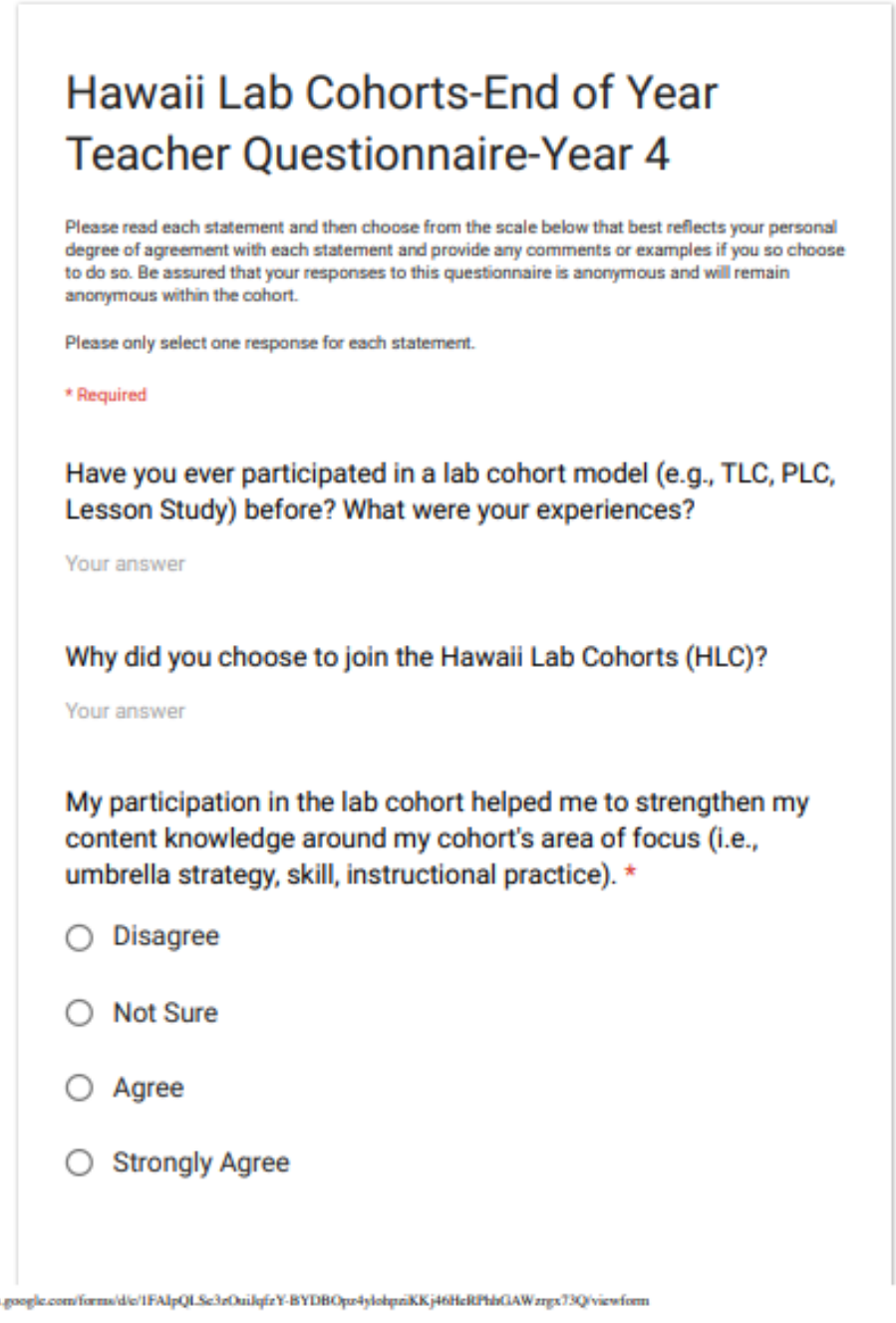
The best things about my lab as a Community of Practice is...

Long answer text

1. One recommendation I would make to strengthen its effectiveness is...

Long answer text

Appendix L: End of the Year Teacher Questionnaire Link



Hawaii Lab Cohorts-End of Year Teacher Questionnaire-Year 4

Please read each statement and then choose from the scale below that best reflects your personal degree of agreement with each statement and provide any comments or examples if you so choose to do so. Be assured that your responses to this questionnaire is anonymous and will remain anonymous within the cohort.

Please only select one response for each statement.

* Required

Have you ever participated in a lab cohort model (e.g., TLC, PLC, Lesson Study) before? What were your experiences?

Your answer

Why did you choose to join the Hawaii Lab Cohorts (HLC)?

Your answer

My participation in the lab cohort helped me to strengthen my content knowledge around my cohort's area of focus (i.e., umbrella strategy, skill, instructional practice). *

- ○ Disagree
- ○ Not Sure
- ○ Agree
- ○ Strongly Agree

https://docs.google.com/forms/d/e/1FAIpQLSe3rOuiIqfzY-BYDBOpz4yIohpziKKj46HeRPhhGAWzrgx73Q/viewform 1/7

Why do you think this?

Your answer

My participation in the lab cohort helped me to strengthen my pedagogy (beliefs around teaching and learning) around my cohort's area of focus. *

- ○ Disagree
- ○ Not Sure
- ○ Agree
- ○ Strongly Agree

Why do you think this?

Your answer

Collaborating and learning from other lab teachers/facilitators supported my ability to implement the strategy/skill/practice connected to my quarterly teacher goals. *

- ○ Disagree
- ○ Not Sure
- ○ Agree
- ○ Strongly Agree

Why do you think this? Can you give a specific example of why or why not?

Your answer

Observational visits of other lab teachers' classrooms helped to strengthen my content knowledge, pedagogy, and/or instructional practice around my cohort's area of focus. *

- ○ Disagree
- ○ Not Sure
- ○ Agree
- ○ Strongly Agree

Why do you think this?

Your answer

Having my lab peers/facilitators observe and give me "actionable" feedback on my teacher goal helped to strengthen my instructional practice. *

- ○ Disagree
- ○ Not Sure
- ○ Agree
- ○ Strongly Agree

Why do you think this? Could you provide an example of why or why not?

Your answer

I was able to use the feedback from my observational visits to adjust, refine and/or extend my instructional practice around my current teacher goal. *

- ◯ Disagree
- ◯ Not Sure
- ◯ Agree
- ◯ Strongly Agree

Why do you think this? If you agree, what specifically helped you to do this?

Your answer

The targeted PDs provided to me during our observational visits/interim meetings strengthen my ability to work towards my own quarterly teacher goals. *

- ◯ Disagree
- ◯ Not Sure
- ◯ Agree
- ◯ Strongly Agree

Why do you think this?

Your answer

My lab cohort's book study readings and discussions contributed to extending my understanding around my cohort's area of focus. *

Helping to connect theory to instructional practice

- ◯ Disagree
- ◯ Not Sure
- ◯ Agree
- ◯ Strongly Agree

My lab cohort's DRIVE folder (e.g., templates, readings, resources) contributed to supporting my ability to implement my teacher goals. *

CoP sharing and creating new knowledge and resources.

- ◯ Disagree
- ◯ Not Sure
- ◯ Agree
- ◯ Strongly Agree

Why do you think this?

Your answer

An aspect/s of the HLC model that had the most impact on my learning around my cohort's area of focus was: Please check as many boxes that apply or add an aspect if not represented. *

- [ ] Observational visits
- [ ] Getting "actionable" feedback on my goal
- [ ] Collaborating with peers around the same focus
- [ ] Receiving targeted PD, resources, and supports to help me achieve my goal
- [ ] Interim meetings as a time for collaboration and learning (i.e., book study & artifacts)
- [ ] Receiving "on-going" coaching and modeling
- [ ] Reflecting and analyzing student work to support my instructional decisions (EAR)
- [ ] Having a platform to share and create knowledge and resources (e.g., Google Drive or Edmodo) with other members
- [ ] Other:

Why do you think this?

Your answer

An aspect/s of the lab cohort experience that contributed to me feeling supported, energized, and/or renewed in my practice was:

Your answer

Were there any aspect/s of the lab cohort experience that challenged or hindered your learning experience?

Your answer

The best part of participating in the Hawaii Lab Cohort is:

Your answer

A suggestion that I have to improve the Hawaii Lab Cohort model for teacher professional learning would be:

Your answer

Page 1 of 1 SUBMIT

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Appendix M: Teacher One-to-One Interview Questions Link

Individual Lab Teacher Interview Protocols (TLC Members)

Umbrella Question: *What happens when five teachers participate in a Teacher Learning Community (TLC) for one school year to learn about literacy instructional methods?*

RQs	
1) How do teachers ***describe*** **their literacy learning experiences** from their participation in the TLC?	1. How would you define effective PD for teachers? 2. Have you ever participated in a Lab Cohort model (TLC, PLC, Lesson Study) before? a. What were your experiences? b. If yes, how would you compare your experiences with your participation with the HLC? 3. What were your reasons (expectations) for choosing to participate in the Hawaii Lab Cohort (TLC) model for teacher professional learning? a. Were your expectations met? Why or why not? 4. How would you describe your literacy learning around your cohort's area of focus (i.e., Using formative literacy assessments to target Instruction and provide strategy lessons to meet students' needs and strengths) from the start of the year to the end? 5. How would you compare the TLC model to other PD models you have experienced?
2) How does **participation** in the **TLC impact teachers' instructional practices of literacy** (i.e., content knowledge and pedagogy)?	6. What specific literacy learning goals did you set for yourself and your students this year? a. How did the TLC support you in reaching these goals? b. Did anything hinder you reaching your goals? 7. What actions within the HLC Learning Cycle supported you most in reaching your own literacy teacher goals? a. Why do you think this? b. Did anything hinder you from reaching your goals? 8. How did the quarterly teacher goals that you set for yourself contribute to your literacy learning process and/or understanding of your grade level CCSS? a. Why do you think this? b. Did anything hinder you from reaching your goals?

	9. How did our quarterly observational visits support or hinder your literacy learning process and/or understanding of your grade level CCSS? a. Why do you think this? b. Did they support your own Q goal that you set for yourself? 10. How did the targeted PD on the observational days contribute and or hinder to your literacy learning process and/or understanding of your grade level ELA Standards? a. Why do you think this? b. Can you provide an example? 11. How did our interim meetings contribute and or hinder to your literacy learning process and/or understanding of your grade level ELA Standards? a. Why do you think this? b. Can you provide an example? 12. How did the book study readings and discussions contribute and or hinder your professional learning (i.e., literacy & CCSS)? a. How was our book club the same or different from other book clubs at your school? b. Connection between anchor text (3rd party) question 13. How did the DRIVE folder support you in your literacy learning process? What (if any) did you find useful about it? Did you contribute anything to the resource folder? 14. What aspect (if any) of the TLC model had the most *impact* (shifted, extended, changed) on your professional learning? a. What aspect (if any) challenged you? b. Why do you think this? Can you give me an example? 15. What aspect (if any) of the TLC model *most* influenced (shifted, extended, changed) your instructional behaviors (e.g., instructional decisions) the most? a. Why do you think this? b. Can you give me an example?
3) What are teachers' perceptions of	16. What impact (if any) did you participation in the TLC model have on your students learning? a. Why do you think this?

students' literacy growth?	b. Can you give me an example? c. Did your participation in the cohort hinder their learning? 17. Thinking back to your case study students from the beginning of the year to now, do you feel that your participation in the TLC impacted or influenced your students literacy learning growth? a. Why do you think this? b. Can you give me a specific example of one of your students? c. Did anything hinder their growth? d. Is there something you would have done differently? 18. Overall, what aspect of the TLC model (Cycle of Learning) had the most impact in supporting your ability to *apply your learning* to your classroom practice to impact student learning? a. What factors contributed this? b. Can you give me an example? c. Did any aspect hinder your application?
What You Know For Sure!	19. What is your one thing you *know for sure* now from your participation in the HLC?

Appendix N: Protocol for Lab Classroom Visits Link

Protocol for Lab Classroom Visits

Approximate Time Frame for a Lab Classroom Visit

- Pre-observation: 15-20 minutes
- Observation in the Lab Classroom: 45-60 minutes
- Debrief: 15-30 minutes

Prebrief

- Group will establish the norms for the whole group discussions and lab classroom visits
- Identify personal goals you have as a learner and provide a context of the classroom

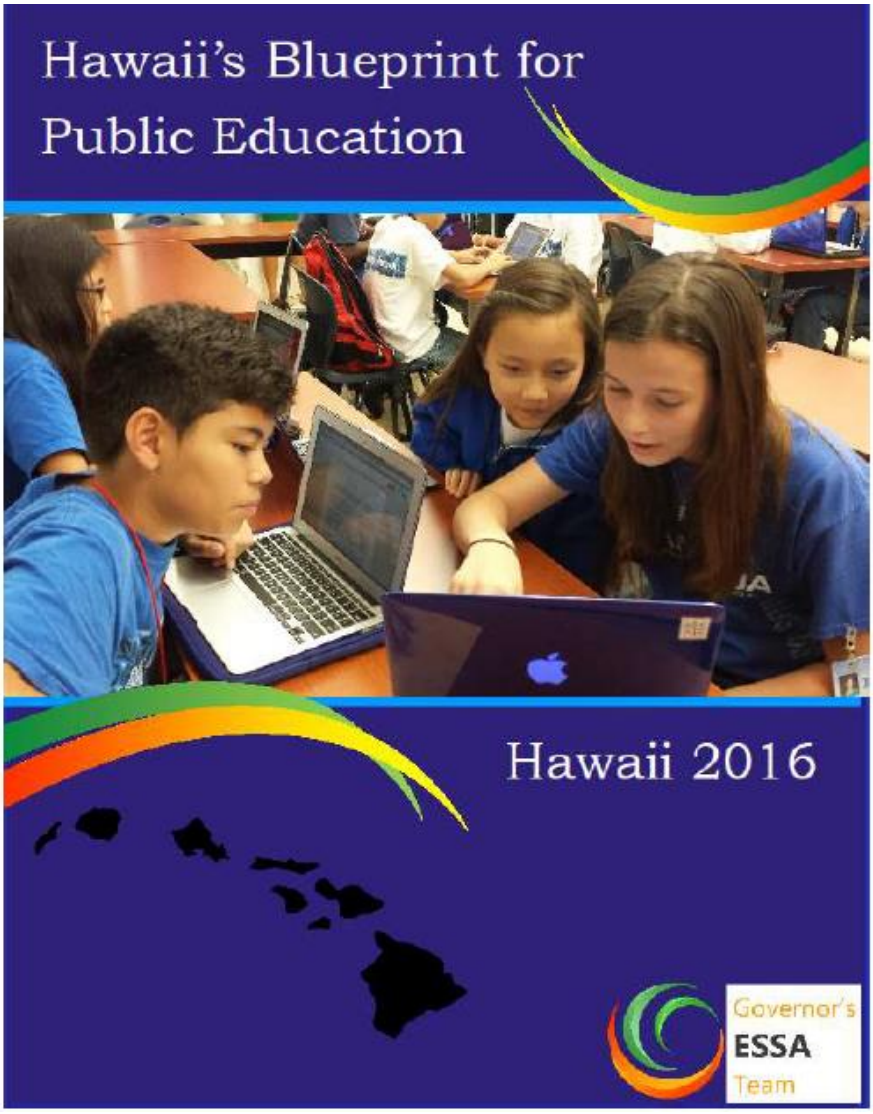
Observation

Use the attached recording sheet for observation questions you have during the lesson

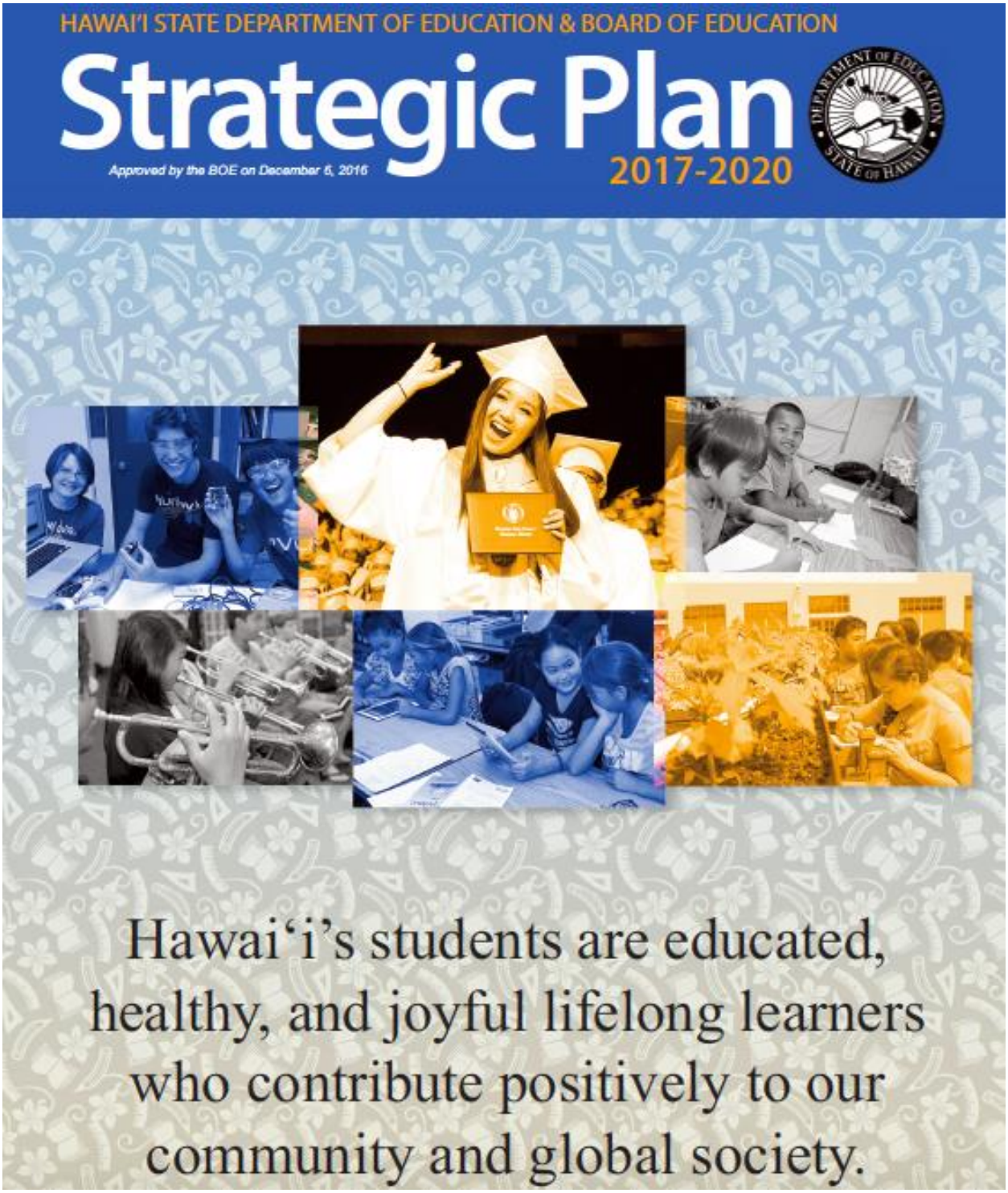
Debrief

- Quick write reflections
- Shared dialogue

Appendix O: Hawaii 's Blue Print for Public Education Link



Appendix P: DOE & BOE Strategic Plan SY17-20 Link



Appendix Q: Researcher Journal Entry

HLC Kick Off

7-31-17

1. **What were my objectives for the day's learning? (intentions)**

My learning objectives for this day is to build relationships among all members of the lab and to build a shared understanding of the model, expectations, and professional learning cycle that we will use throughout the year.

The Kickoff is also a good place to co-create our norms and refine the cohort's umbrella focus from the summer.

This year's Kick Off also included Joan, Michelle, and Janel who are all interested in being facilitators of their own lab this year or in the future. So, this was a good time to have them experience the process of a Kickoff, while also building their background knowledge of the model.

2. **What really happened?**

Overall, I think it was a good day. Candice and I worked well as team in preparing for the event and delivering the information.

I think the sharing of the identity bags was a good way to start off the morning because it allowed everyone to get to know each other a little bit more outside of school and make connections. I should have revised my identity bag for this year. I was surprised how much other teachers shared and how much thought that they had put into it. I think I felt a little "clunky" in my own sharing, probably because I did not review it beforehand and could have revised it a bit to match my current identity.

Although we did a good Job covering all of the key components of the model, I think we could have provided better examples (teacher feedback). The feedback example that I provided was a bit weak because it was after the 2nd round. The good part though was it was short and kind, so at least it didn't scare the teachers' off to receiving feedback from their facilitators.

The norm co-creating activity went well. I was surprised as how "respect" had the most post-its. Sophia surprised me with her concern that things will not always go this way…which I appreciated her honesty, but sensed a negative vibe from her most of the day until the end of the day.

When we met in our cohort groups, the teachers still agreed on the umbrella focus:

Small Group Instruction: Using formative literacy assessments to target Instruction and provide strategy lessons to meet students' needs and strengths.

They said they wanted to break it up the focus into semesters: 1) formative assessments and 2) Strategy lessons.

Most of the teachers felt that the anchor text was a good one, but not many had read or even looked at the table of contents yet.

When I asked them to write up a differentiated goal to put under the umbrella I saw that many felt flustered and was not sure what to write. Zoey wrote hers and put it up and I thin Claire was trying to, but after I sensed that others felt uncomfortable I just said, "Don't worry we do not have to do this now."

**I did notice that in Candice's group the teachers put up what their "vision" was for student learning. I will do that next time.

As for relationship, I think everyone enjoyed the day. I tried to bring good energy and connect with all the teachers, but it is also hard when you are facilitating, and this is your 4th PD in a row. I am wondering about my group this year. It felt a little flat in the afternoon when we meet together. Sophia brings a very strong energy to her which I hope will not bring down the group.

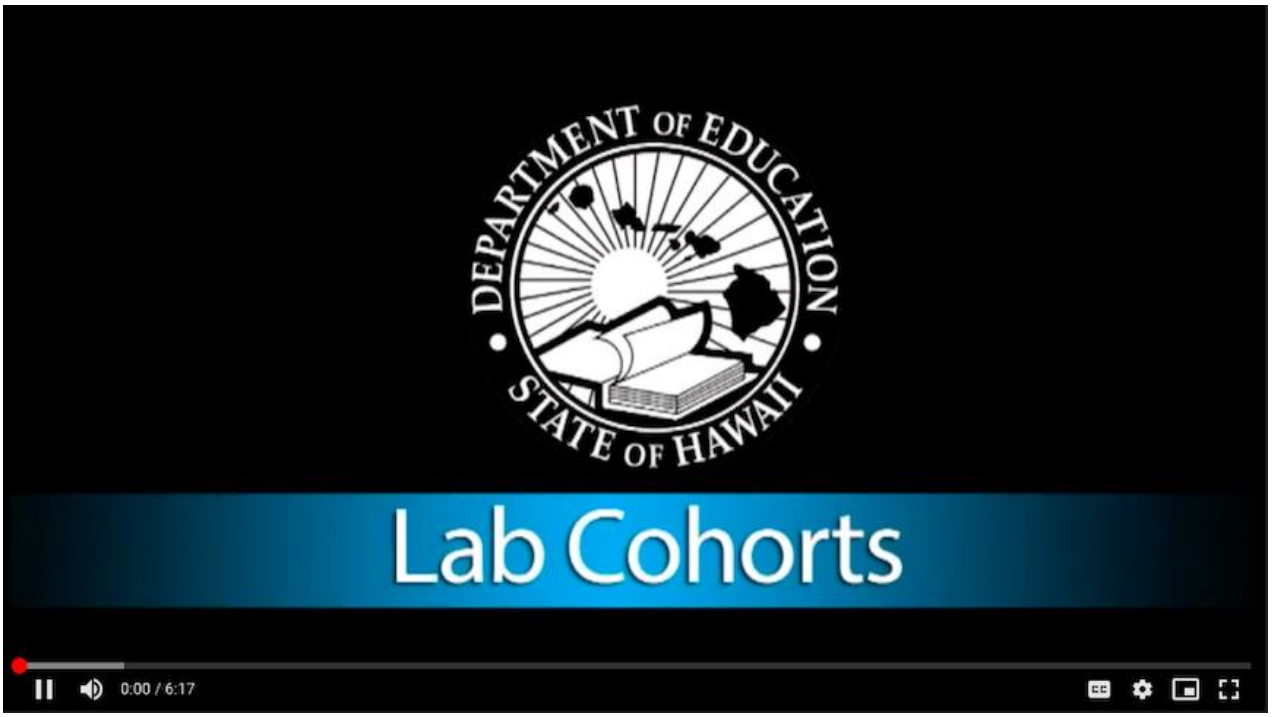
Overall for PD delivery was good, but I would like to add in more "energizers" throughout the day with the teachers (think Eric Jensen style).

Appendix R: HLC Cohort Video #1-Mahalo School/Complex Link

Hawaii Department of Education (HIDOE) Website: Posted March 09, 2016

To access, please click on link or type into browser the following url link:

https://tinyurl.com/HLC-Video-1-March-09-2016



Appendix S: Hawaii Lab Cohort Teacher Collaboration HIDOE Video #2 Link

Hawaii Department of Education (HIDOE) Website:

http://www.hawaiipublicschools.org/TeachingAndLearning/EducatorEffectiveness/ProfessionalDevelopment/Pages/Hawaii-Lab-Cohorts.aspx

Appendix T: Debrief Feedback Vignette

As the members of the film crew noisily set up their cameras around us for our HLC Teacher Collaboration Video #2 and the teachers nervously sat wondering how they should act during filming, I tried to pull the group together to begin our debriefing session to provide Jo and Claire with feedback on their observational lesson.

[00:48:42.82]

Es: OK, everyone. . . . So the lens of focus that she [Amelia] had was strategies: Am I able to address students individually. . . for different strategies like linger finger picture and sound matching? Am I giving enough attention and support to each student? And are my students on task and engaged or are they disengaged in this small group?

I looked around the faces at the table to see who would like to provide Amelia with feedback on her teacher goal. Because the teachers were still quite nervous about being filmed, no one's hand went up. I decided to provide them a prompt by stating, "OK, so let's begin by starting with some wows!" Elizabeth hesitantly smiled and signaled that she would speak first. I felt relieved, knowing we could always count on her to begin by finding something positive to highlight in a person's practice.

[00:50:03.36]

Elizabeth: So, I wanted to start because I really, really loved how you were telling the kids, "That's what good readers do!" "You were using the words." Like yourself correctly using good intonation. I liked that you use our words with them. I feel like that's so important for them to hear those words and that they know what it is and what it means and all that feedback that you were giving. . . to both groups. And again, I really liked how you were you were saying, you know, "That's what good readers do." I really liked that!

Amelia smiled as she received the feedback from Elizabeth. Without missing a beat, Claire looked down at her observational notes and jumped into the conversation, her voice upbeat:

[00:50:37.31]

Claire: On that, I love how you emphasized, "Just keep trying. We have to keep trying. . . ." And I love that they were just so encouraged about that. You used your anchor charts. It was clear that they all knew the strategy that they were supposed to be doing. . . . They were all following along with their fingers. . . . I loved that you were able to hear each one of them read, which I think is so important that they all got that one-on-one time with you. That was awesome!"

Amelia, listening intently now, replied to Claire with a simple "Thank you."

Sophia followed in a monotone but offered very specific evidence of what Amelia had done well in her lesson.

[00:51:19.48]

Sophia: The warm up was great because the kids really enjoyed it. So engagement was . . . high. They were smiling and . . . starting with the feeling of success. . . . And then I agreed with the feedback, super descriptive your use of academic vocabulary. It was such great feedback [for the students]. . . . And then I liked how you—that you read the text first. Then the students did the shared reading, taking turns with the lines; and then the students read it independently. And so that helped scaffold for student success and then also developing fluency in word recognition and having sort of multiple readings without it being boring.

Zoey looked at me and signaled that she thought I should speak next, but because it was my policy that the facilitator is always, I motioned with my hand to encourage her to go ahead of

me. She smiled and complimented Jo on how much she has grown in her practice from the beginning of the year.

[00:52:36.71]

Zoey: “First, I just want to say I know I didn’t see you teach before, but I can tell you you’ve grown so much. And like you’re doing small reading groups. You should be so proud of yourself!”

[00:52:46.48]

Amelia: “Yay! I never did small reading groups before!” She responded enthusiastically to Zoey, smiling and looking at everyone in the group.

[00:52:46.48]

Zoey continued, building on Jo’s excitement:

So I thought the pace of your lessons were great! It kept the kids really actively engaged. It flowed nicely. You move from one activity to the next. I liked how at the beginning you reviewed the anchor charts, and you used the magic reading finger for engagement. All those little fun things help out, and also it’s a great strategy for tracking print work.

Kari continued on with her wows for Jo, her face lighting up even more.

[00:53:44.34]

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